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Society Proceedings.

MEDICO-CHIRURGICAL SOCIETY OF MONTREAL.

Stated Meeting, May 23rd, 1884.

T. A. RODGER, M.D., President, in the Chair.

Dr. R. L. MACDONNELL exhibited a patient with *Keloid Tumors*, supposed to be of idiopathic origin. The patient, under 40, had been under treatment at the Out-patient Department of the Montreal General Hospital for a tubercular syphilide upon his forehead, which is now rapidly disappearing under the iodide of potassium. It was found that he had two keloid tumors upon his body together with the remains of a third. The first of these appeared upon the buttock, when he was 15 years of age. It was at first painful, but as it enlarged became less sensitive. After ten years it began to shrink. Nothing now remains of it but an elongated scar. Upon the breast, lying horizontally across the sternum, just below the junction of its first and second pieces, there is a tumor which is well defined, raised above the surrounding skin, firm, smooth and elastic, and of a pink and white color. It is 7 inches long, ½ to 1 inch wide, and consists of two masses, each about half the size of an egg, connected by a band of tissue which resembles greatly the cicatricial bands seen in large scars. It made its first appearance fifteen years ago, and has been steadily growing ever since. It is more itchy than painful, and is by no means tender on pressure. A third tumor exists upon the left shoulder. It is but 4 inches long, but of exactly the same shape and appearance of that over the sternum.

Dr. HINGSTON said he had never seen idiopathic keloid; never saw keloid disappear. In traumatic keloid the skin is never movable, as in this case.

PATHOLOGICAL SPECIMENS.

Dr. SUTHERLAND exhibited the following specimens:

Kidneys and Heart from a case of Chronic Bright's Disease.—Symptoms; shortness of breath for one year; frequent micturition at night for several years. Before death, developed acute pericarditis and effusion into right pleura. Suppression of urine for 36 hours before death. Suffered acute dilatation of right heart. Kidneys reduced in size; weigh 100 gms., and are typical specimens of cirrhotic kidney. Heart shows slight degree of pericarditis: no effusion. Dilatation of both ventricles, especially of right, which extends 1½ inches to right of sternum. Tricuspid orifice greatly enlarged. Muscle substance pale and fatty but unusually tough, especially about papillary muscles.

Right Kidney, from a case of Chronic Bright's Disease, having the appendix vermiformis and cœcum attached to it.

Cirrhotic and Fatty Disease of the Liver.—Dr GEO. ROSS gave the following description of this case;—G. N., hard drinker past ten years; attack of acute nephritis three months before death; no dyspeptic symptoms till just before admission to the hospital. *On admission*—Skin moderately jaundiced (not noticed till that day); great distension of abdomen by fluid; legs œdematous; fever and delirium; severe diarrhœa, stools qui-

colorless; albumen and bile-stained epithelial casts in urine. Breathing very distressed; pulse weak. Aspirated abdomen, with some relief to respiration. Died comatose in five days, jaundice persisting. At autopsy, large quantity of fluid in abdomen; liver about normal size—good example of cirrhotic liver, which is somewhat fatty; obliteration of cystic duct by old inflammation; hepatic and common ducts free; intense duodenal catarrh especially around papillæ. Kidneys large, fatty and bile-stained; vermiform appendix large, and bound tightly to lower extremity of right kidney by old adhesions, which have become organized.

Myoma of Cervix Uteri, size of small orange—Removal—Recovery.—Dr. GARDNER exhibited the specimen, which he had removed from a lady aged 52. Patient had suffered from hemorrhages and pelvic distress for 6½ years. The tumor was sessile, and dilated the cervix. The diagnosis was difficult, as there were adhesions all around between the tumor and the cervix, with the exception of posteriorly, where was an opening through which the sound entered the womb. The uterus was retroverted. The tumor was removed without much difficulty, being shelled out with the finger. There was very little bleeding. Out of 74 cases Dr. R. Lee had only seen four situated in the cervix. Dr. Gardner said that this was the fourth sessile tumor he had removed within a year, all the patients recovering. He made this statement as Mr. Tait. in his last edition, advocated the removal of the ovaries in these cases, as he had found that 50 per cent. of deaths followed removal of sessile myomata from the interior of the womb.

Dr. HY. HOWARD exhibited under the microscope, a slide given him by Dr. Spitzka of New York, shewing the origins of the roots of the 6th, 7th and 8th nerves from the medulla of a cat.

Varicocele of the Spermatic Veins.—Dr. RODDICK read a paper on this subject.

Dr. HINGSTON said the subject was interesting, as this trouble was very often seen. He prefers, when the operation is necessary, that of tying the veins and dividing between the ligatures. He had only operated three times, and now almost questioned the necessity of ever-operating. The trouble comes on, as a rule, about the age of 23, and goes away after a couple of years. He was of the opinion that it was not a cause of emissions, as the testicle is often atrophied, and therefore not so active. The mind was more affected, as a rule, than the scrotum. The ring or a truss or suspensory bandage, were often useful. He had never seen a case requiring castration.

Dr. F. W. CAMPBELL endorsed Dr. Hingston's views regarding this very common condition.

Dr. FOLEY said that Mr. Jonathan Hutchinson's treatment was purgation and elevating the testicles.

Dr. GEORGE ROSS thought the operation ought not to be swept away, for it has proved to be free from danger, and ought to be resorted to where the distress was very great. He has found palliative measures, such as the soft metallic ring, to be all that is necessary in most cases. He has not found either the truss or suspensory bandage to give satisfaction.

Dr. HY. HOWARD said there was no such thing as hypochondriasis. If the patient complained of pain there must be some physical cause. He believed that at times the operation was justifiable.

Dr. KENNEDY asked why so much fear about interfering with veins. He believed that where the operation is indicated it ought to be performed without hesitation.

Dr. RODDICK, in reply, said that the danger of working with veins was considerable. The writer of the article on this operation in "Holmes' Surgery" says that he had a case where two joints were lost from pyæmia following the operation.

Stated Meeting, June 13, 1884.

T. A. RODGER, M.D., President, in the Chair.

Dr. R. L. MACDONNELL exhibited the following anatomical specimens made from a frozen subject—1st, Cross section of the thorax; 2nd, cross section of the abdomen on level with first lumbar vertebra; 3rd, vertical section of the pelvis.

Erysipelas of the Face, followed by double Cerebral Abscess.—Dr. ARMSTRONG narrated the case. F. F., æt. 17, a student was first seen Feb. 15, 1883. For past three weeks, from over study, has been running down in health. Has suffered from vertex headache. To-day the bridge and both sides of the nose are red, swollen, hot and painful. *18th*—Erysipelas has extended over both cheeks and upwards over the lower half of forehead; had slight chill this morning; temperature 104°. *20th*—Pain at top of the head still very severe, preventing rest and sleep. He answers questions correctly, but speaks in a slow,

drawling manner. Says he hears nothing with right ear. Temperature 100°; pulse 56. *23rd*—Pulse 68, and intermittent; temperature 103.5°; opened pocket of pus in forehead. *24th*—Mild delirium present. Let out pus at root of nose. *25th*—Had good night; pulse 66; temperature 101.8°; answers questions rationally, but slowly. *26th*—Gave exit to pus at inner and upper angle of right upper lid. *27th*—Dr. Proudfoot made an incision into the orbit quite to the apex to let out pus. *March 1st*—Has had very restless night; much pain in the head; pulse 54; temperature 101.8°. *3rd*—No headache; is more intelligent. *5th*—Has had paroxysms of intense headache; Cheyne-Stokes breathing. *8th* — Constantly moaning, no delirium; pulse 60; temperature 97.8; extremities cold. *10th*—Troubled with vomiting; emaciation extreme. *20th*—Growing worse. Dr. Proudfoot made three openings around the right orbit to relieve pus, which was pushing the eye forward. *30th*—Much the same; vomiting continues. *April 14th*—Patient died of exhaustion after an illness of eight weeks and two days. At the *post-mortem* the membranes of the brain were found normal, with the exception of that portion of the dura mater covering the petrous portion of the right temporal bone; here it was of a very dark color, thickened and softened. The arachnoid and pia-mater were normal. An abscess the size of a walnut was found in each hemisphere, and similarly situated on either side. They occupied the centre of the occipital and part of the parietal lobes. They were not congested. The longitudinal sinuses were healthy. Many of the symptoms usually looked for in cerebral abscess were wanting. There was an entire absence of epileptiform seizures, rigors, paralysis, or disordered sensibility; the prominent symptoms being severe headache, delirium, vomiting, a slow, defective articulation, slow pulse, and slow, intermittent respiration. The last two symptoms were evidently due to pressure.

Dr. Ross thought the abscesses were caused from the suppuration in the orbit. In the few cases of cerebral abscess which he has had, two were in the cerebellum. The absence of typical symptoms in cases of tumors and abscesses of the brain was not uncommon.

Dr. Hy. Howard mentioned a case of supposed abscess following erysipelas of the face. He thought that all organs were liable to be affected by inflammations of the skin covering them, even when bony walls intervene.

Dr. Shepherd had seen several cases of abscess of the brain, but all from ear disease. He was of the opinion that in this case it was due to pyæmia.

Dr. Proudfoot said he had often seen this patient with Dr. Armstrong, and that there had been very little ear trouble all through—nothing, in fact, to indicate disease of the ear itself. Believed the abscess was due to the erysipelas. Had examined the eye several times with negative results.

Dr. Armstrong, in reply, said why one would think the abscess due to disease of the ear was because this was so frequent a cause, and besides, the dura mater was dark and necrosed over the petrous bone. Deafness was also present, without pressure on the auditory nerve.

High Specific Gravity of Urine.—Dr. Foley said that lately he had examined a specimen of urine of a clear amber color, containing neither sugar nor albumen, and yet having a specific gravity of 1035.

Dr. Ross said this was not very unusual. Lately he was attending a child of three years of age, who, from over-feeding, had become ill. She had an enormous appetite, but steadily emaciated. Diabetes was suspected. The specific gravity of urine was from 1037 to 1038, but contained no sugar. Examination for urea showed this present in abnormal amount. She soon recovered under appropriate treatment.

Dr. Stewart said that in all cases where there was deficient oxidation—that is, in all cases of azoturia—a high specific gravity would be seen. Correction of the diet will cure this condition.

Hysterectomy on an Insane Woman.—Dr. Trenholme read a paper on this case, of which the following is an abstract:—

Mrs. R. M. W., of London, Ont., aged 30, was married at the age of 15, previous health being good. Shortly after marriage pregnancy ensued. Excepting heartburn, nothing unusual occurred until her delivery in the spring of 1873. During labor two severe epileptoid convulsions occurred, necessitating instrumental delivery, the child being still-born. Vomiting followed, then blindness, which latter remained for some days; she eventually recovered. Again becoming pregnant, was delivered naturally of a living child in the latter part of the same year. Epileptic fits now

set in, especially at menstrual periods. On account of the rapid recurrence of these fits, a vaginal examination was made, ulceration of the o diagnosed, and treatment adopted, with improv e ment in local condition. No improvement in the fits. Patient took to alcohol for relief, and at last became insane. In 1882 she was sent to the asylum, and entered as an incurable epileptic, with erratic symptoms. Dr. Midford of Portland, who saw the patient, recommended öophorectomy, but this Dr. Bucke did not think necessary. The patient was taken out of the asylum, womb and ovary reported contracted and ovary attached. Vaginal öophorectomy was performed on 10th April, 1883; one ovary was found cirrhosed. Recovery took place, and patient menstruated at usual time, and has continued to do so ever since. No improvement mentally or with the fits, the patient was returned to the asylum. It being considered essential that the tubes should also be removed in these cases, and by abdominal incision this was decided on. This was for the purpose of exploring the pelvis for any supernumerary ovary or remains of ovarian tissue, and if the uterus was diseased, to remove it also. The operation was performed April 23rd, 1884. There was no trace of an ovary or ovarian tissue. The uterus was enlarged and densely indurated, and tubes hypertrophied. The uterus and tubes were then removed. The operation lasted less than one hour, and was well borne by patient; vomiting was somewhat severe afterwards, the patient, however, apparently doing well for the first 36 hours. After this time patient steadily continued to fail; pulse 140, and temperature 102; death ensuing 59 hours after the operation. The report states that "ever since the operation, her fits (slight ones) have been very frequent, but at no time has there been a single unfavorable abdominal symptom, and on examination after death the wound seemed to have been almost healed by first intention. Cause of death, continued and progressive shock." In speaking of this case, Dr. Bucke told me the patient had a series of epileptic fits lasting for 11 hours almost continuously, and that as she had two such attacks while in the asylum, during each of which she nearly died, he felt convinced this last attack, coming on toward the close of the second after such a severe operation, "had a great deal to do with the fatal termination." The following points connected with the operation itself are perhaps worthy of note: 1. The abdominal walls were divided in the exact median line, so that the peritoneum was reached without dividing a single muscular fibre. 2. The uterus was carried upward and retained there by means of a large rectal bougie passed up the vagina and pressed against the os uteri. 3. The uterine arteries and other vessels were secured by fine hemp ligatures, which embraced the folds of the broad ligament corresponding to each tube and ovarian ligament. 4. The uterus was divided at the inner os by a V-shaped incision, and the amputated surfaces brought together by five catgut ligatures in such a way that a simple linear incision resulted. The deeper parts of the opposed surfaces were then more closely approximated by means of quilting them with catgut, about five double or shoemaker's stitches being thus employed. 5. The deep abdominal sutures were inserted so as to carefully avoid any portion of the muscular tissue. 6. No abdominal bandage or long plaster was employed with the object of strongly encasing the abdomen, a practice fraught with no possible good, and often potent for much evil.

Upon examination of the parts removed, the Fallopian tubes were found to be occluded for about an inch from the horns of the uterus, and also very firm to the finger. The uterus was hard and about twice as large as it should have been. The cavity of the body was almost entirely obliterated, admitting the point of the probe for about a quarter of an inch only. This condition prevented any communication whatever between the tubes and uterus. Menstruation must have been from the cavity of this neck.

I much regret the issue in this case, because some two months ago I removed the ovaries and tubes from a patient who had been suffering at her menstrual periods with increasing severity up to about six months before the operation, when suicidal mania supervened, and the monthly disappeared. I had a letter from her medical adviser a few days ago, in which he says; "Miss C. is doing well, and her mental condition much improved, though hardly up to par." It may be that there are few cases of insanity which would be cured by removal of uterine appendages, yet, doubtless, there are some cases where the cessation of all sexual activity holds out the only hope of ameliorating their sad fate. Two classes of cases would seem to warrant the performance of the operation, viz., 1st, those cases of *imperfect sexual development* where the nervous energy is diverted

and expended in fruitless attempts to perfect its growth and maturation. Here may we not hope that the removal of the uterine appendages will be found to improve the mental condition, and, perhaps, in some cases restore to sanity. 2nd, Again, in an opposite class of cases, where the activity of the sexual organisation dominates the mental powers, may we not hope that the cessation of this controlling force will be followed by a calm and such a change in behavior as the results of castration in the lower animals would lead us to expect. I think these points are worthy of careful study, and hope they will be tested so as to afford statistical data for future guidance.

Stated Meeting, June 27, 1884.

T. A. RODGER, M.D., President, in the Chair.

Crushed Hand treated by dry and infrequent dressings.—Dr. SHEPHERD exhibited a patient who, some two weeks before, had received a severe crushing injury of the hand. The palm of the hand was deeply incised from one side to the other, and all the short muscles of the thumb were torn out and lying exposed in the palm. The back of the skin of the hand was enormously distended with effused blood and serum. The extended muscles were replaced, a drain inserted on the thumb side, and the wound stitched up. The back of the hand was deeply incised over each metacarpal bone to allow the effused blood to escape, and the whole dressed with iodoform and pads of naphthalized jute, covered with washed gauze, and firmly bound with an antiseptic gauze bandage. Owing to the oozing of blood the dressing had to be changed next day, at which time the drainage tube was much shortened. It was redressed as before, and as there had been no elevation of temperature, discomfort, or pain, the hand had not been disturbed since that time. Dr. Shepherd now removed the dressings before the Society, and showed that the condition of the hand was most favorable; there was union by first intention everywhere; except where the drainage tube was, the hand had quite a normal appearance, and the dressings were only stained with a little bloody serum. Dr. Shepherd remarked that this case was an example of many he had treated in the same way, and which showed the benefit and simplicity of dry and infrequent dressings.

Dr. RODGER said that he treated compound fractures from railway accidents with dry dressings of absorbent cotton and iodoform.

Sarcoma of the Skin and Cellular Tissue about the Ankle—Amputation—Recovery.—Dr. SHEPHERD read a paper on this case, and exhibited both the foot and slides from the diseased structures. The following is an abstract of the paper, which was published in full in the *Medical News* of Sept. 20, 1884:

E. M., a delicate-looking youth, aged 18, came to hospital in April last, suffering from an ulcerated swelling above the left ankle. The ankle was first injured six years ago by a fall, from which he recovered so as to walk as well as ever, although a slight swelling remained. A year after it became painful and more swollen. An unsuccessful incision was made for pus, which opening never healed. Three years ago he was kicked on this ankle by a horse, which increased the trouble. The joint itself, since the first hurt, was apparently never affected, but the swelling on the inner side slowly increased, and at different points sinuses would form. On entering hospital, the parts about the inner side of the left ankle were of a shiny, dusky red color and considerably swollen. At the upper part were several sinuses, and near the centre a small ulcer. Pressure, which gave a semi-elastic sensation, was not painful. A free incision was made. After cutting through very thick infiltrated skin, pockets of a tissue like granulation-tissue were opened up. A neoplasm was suspected, and some of the substance from the pockets was sent to Dr. Wilkins for microscopical examination. He pronounced it a very good example of the round-cell sarcoma. Dr. Shepherd at once amputated the leg at some distance above the disease, dressing the stump with iodoform and pads of sublimated jute. Decalcified bone drains were tried, but had to be given up, as they collapsed. The case did well, the temperature after the third day never reaching 99°. The case was instructive, chiefly on account of the difficulties it presented for diagnosis and the importance of its being correct, as sarcoma, especially the round-cell variety, unless removed, is a fatal malady.

Dr. GEO. ROSS asked what was Dr. Shepherd's experience with decalcified bone tubes, and why they failed in this case.

Dr. SHEPHERD, in reply, said that these tubes had been kept in carbolic oil, which made them too soft, spirit being the better fluid to keep them in. They use these tubes in New York, but have difficulty in getting them just right. Some become absorbed too soon; others never absorb.

Dr. FENWICK had found the india-rubber tubes to give entire satisfaction; in some of his cases of excision of the knee, the dressings were renewed but three times in all.

Dr. RODDICK said he made some decalcified bone tubes, and used them twice, but they became clogged. He said McEwen experienced this same trouble, and now passes horse hair through the drain. This he finds prevents clotting. Another objection to them was that the bone tubes sometimes become absorbed too fast, and leave a pocket of pus undrained.

Dr. STEWART exhibited a case of *Multiple Cerebral Sclerosis, having an Apoplectiform mode of onset, and where Syncopal and Apoplectiform attacks frequently recur.* The patient, a man aged 47, hotel porter, came under observation three months previously, complaining of obstinate constipation, difficulty in speaking, and dimness of vision. He gave the following history: Three years ago, while in the enjoyment of his usual health, he was seized, while seated on the driver's seat of an hotel 'bus, with giddiness. He was at once carried home, and almost immediately afterwards passed into a state of unconsciousness, which lasted twelve hours. After the return of consciousness, he passed, in a few minutes, into a delirious state of a few hours' duration. For some three weeks afterwards, his wife says he was "weak and useless," and "his speech was so curious that it was difficult to understand what he said." In the course of a few months he was able to speak much plainer, but not so plain as he could do previous to the attack coming on him. In the autumn of 1882 he spent some weeks in the General Hospital, and while there was under the care of Dr. Ross. Through Dr. Ross' kindness I am enabled to compare his state at that time with what it is at present. With the exception of syphilis, he never had any trouble up to the time of his present affection coming on. He formerly drank to excess, but not since the commencement of his present illness. His father died of what he calls "liver complaint." His mother and only brother are dead, but he is ignorant of the cause in either case.

Present state—Nervous system.—There is a considerable degree of mental weakness, which has only been apparent during the past year. It is progressively becoming more and more pronounced. He frequently loses his way in the streets. He is extremely emotional, laughing and crying without an apparent cause. His memory for recent occurrences is very poor, but good for trifling events of many years past. He has a very exaggerated opinion of his own cleverness. As he never received any education, he is unable to write. His speech is markedly slow, monotonous, and syllabic. The voluntary power in both upper and lower extremities is good. When he undertakes to perform any movements, the muscles commence to tremble. This tremor, however, is not always marked; very frequently it is absent, especially in the afternoon and evening. It is very pronounced immediately after getting out of bed in the mornings. The nutrition of the whole voluntary muscles, except the tongue, is normal. The patellar and superficial reflexes are present. The co-ordination and muscular sense are not interfered with. There is no disorder of sensation. There is no paresis of the bladder or incontinence of urine. There is no obstinate constipation. Dr. Buller has examined his eyes. He finds simple atrophy of both discs. Vision is *nil* in the right eye, and almost so in the left. There is no paralysis of any of the ocular muscles. Hearing, taste and smell are good. There is paresis of the respiratory branches of both facial nerves, as is evidenced by the expressionless aspect of the lower half of the face, the obliteration of the naso-labial folds, the dribbling of saliva from his mouth, and by his inability to whistle and to show his upper teeth. The soft palate is very slightly paretic. When the mouth is opened, the lower jaw trembles. He has difficulty in protruding his tongue, and when he attempts to do so it commences to tremble. There is not only difficulty in protruding the tongue, but there is difficulty in keeping it protruded. The tongue is very slightly wasted, but it is not the seat of any fibrillary twitchings. There is no impairment of either the motor or sensory divisions of the trigemminus. He has no difficulty in swallowing. He complains much of giddiness, especially when walking; objects, he says, are constantly turning around him. He is subject to both syncopal and apoplectiform attacks; both coming on suddenly, without warning,—the former lasting a few seconds, and attended with paleness of the face; the latter lasting several hours, and attended with suffusion of the face and an elevated temperature. His pulse is constantly beating between 40 and 45 times in the

minute, and at times it is irregular in rhythm. His urine is free from both albumen and sugar.

The patient's present condition was then contrasted with what it was when he was in the General Hospital, 18 months previously.* At that time the symptoms present were purely bulbar. Since that time the bulbar symptoms have gradually increased in severity, and, in addition, we have involvement of the optic tracts, cerebrum, and in all probability the cerebellum also. Although the giddiness may be explained otherwise, it is probable that its mode of causation in this case is the formation of sclerotic nodules in the cerebellum. Whether the slow pulse is a proof of the implication of the vagus nucleus, it is impossible to say. If so, it is necessary to suppose an irritative lesion of the cardiac inhibitory nucleus. The case is undoubtedly one of multiple cerebral sclerosis, commencing in the pons and medulla and gradully extending into the cerebrum, cerebellum, and optic tracts. There is no evidence of the pyramidal columns being affected either primarily by the sclerosing of their structure or secondarily by a descending degeneration. Neither is there any proof of any other portion of the cord being involved. The case is therefore one of pure cerebral sclerosis. It is noteworthy for its peculiar mode of onset, and for the apoplectiform and syncopal attacks to which the patient is liable. Another interesting feature in this man's case is the intermittent presence of tremor. In the great majority of cases of disseminated sclerosis, tremor on voluntary movement is the most constant and most characteristic symptom present.

Dr. GEO. ROSS said he had not seen the patient since he reported the case to the Society. At that time he had recently had an attack, apoplectiform in character, which he believed to have been due to a hæmorrhagic clot.

In reply to Dr. Roddick, Dr. STEWART said his patient had taken iodide of potassium.

Dr. HY. HOWARD said that these cases of sclerosis vary so much that it is difficult to group the symptoms so as to tell positively whether the brain or the cord was affected primarily. Erb says that out of 200 cases, 171 were syphilitic, and the cord was first affected. Dr. Howard's own observations showed that 7 out of 10 had syphilis. A man in the asylum denied having had syphilis till the marks were found; his first symptom was impotency. He (Dr. H.) had never seen a case cured. Insanity in those cases of progressive paresis was caused by reflex action from the cord where it is diseased to the higher nervous centres, which are the lowest organized.

Cancer of the Stomach; rapid growth of the tumor.—Dr. CAMPBELL related the following particulars of this case:—Had been sent for early in May to see Mrs. L., aged 41, who was complaining of pain over the stomach, but not very severe. As her mother had died of cancer, he was pretty sure this would prove to be the same trouble, although no tumor could, as yet, be made out. Within a week vomiting set in. *June 1st*—Rather worse. *5th*—Could keep nothing on her stomach. On the 7th, could feel a nodule, which, in 48 hours, increased wonderfully from being the size of the top of the thumb to that of a walnut. The vomited matters were the color of bile—never bloody. The patient died a week later. The pylorus and lesser curvature were implicated. There was stenosis, but not much dilatation of the stomach. Pain, which was never very severe, was less toward the end. There was no cachexia present.

Dr. TRENHOLME said he had had two similar cases. In one, there were no symptoms till within three or four days before death, although a cancerous mass the size of a turnip existed, which involved the stomach; the other was that of an old gentleman, who ate well up to the last, and had very little pain.

* A detailed report of his then state will be found in the Society's Transactions recently published. Dr. Ross gave an account of his condition at the meeting held on December 1st, 1882.

Progress of Science.

THE CHANCROID AND ITS TREATMENT.

By J. HENRY C. SIMES, M.D.

The question of the treatment of any venereal sore is one which has of late years given rise to two methods of therapeutics. On the one hand we have those who advocate, as a rule, the application of some destroying agent to the lesion, and, on the other, those who are opposed to any form of cauterization.

To consider the subject in a satisfactory manner, it becomes necessary that an understanding of the nature of the lesion should be at least approximated, since much will depend upon the opinion we hold in regard to the affection.

Without entering into a discussion upon the various theories of the duality or unity of the vene-

real sore, I will divide them into two varieties, those which are followed by syphilis and those which are not. That these two kinds of sores are met with, all experience is an evidence of the fact. The doubtful and disputed point is to know where to draw the line, to differentiate between an infecting and non-infecting lesion. That it is possible, in every case, to determine, with absolute certainty, the precise nature of every venereal sore, all writers are agreed in the opinion that such accuracy of diagnosis cannot be reached. There are, nowever, in most cases of venereal sores, some symptoms which justify us in placing the lesion under one of the two varieties. It is well, in every doubtful sore, never to give a positive opinion of its nature, but wait until the time for constitutional symptoms has arrived, and then all doubts will be removed. Indeed, it may be considered prudent, in no case of venereal sore to commit ourselves to a positive opinion, until we are satisfied the time for systemic infection has passed. Our diagnosis may be correet in ninety-nine out of a hundred cases, but there always exists the possibility of error; and where so much depends upon the opinion of the surgeon, not to the patient alone, but to his family and society, it is imperatively our duty to use every precaution to protect all against such a misfortune as may follow a hasty and wrong diagnosis. The symptoms which accompany the non-infecting venereal sore—the chancroid—may be summarized as follows: The origin of this lesion is usually due to contact with pus from a similar lesion, or to accidental inoculation of the secretion of a chancre upon a person already affected with syphilis. And I am also inclined to believe the possibility of the formation of a chancroid from pus other than that obtained from a chancroid, or, in other words, from pus from other sources. The stage of incubation of a chancroid is so irregular and uncertain that such a period may be regarded as not existing, and is of no value as a diagnostic symptom, except in a differential diagnosis from the infecting sore. The seat of the chancroid is, almost without exception, either upon the glans penis or prepuce. The possibility of a chancroid occurring at any other locality cannot be denied. Writers of unquestionable ability have met and described such lesions. That they are of the greatest rarity must be admitted, since seventy or eighty will cover all the reported cases, while those of the glans penis and prepuce may be counted by the thousands. The chancroid begins as a pustule or ulcer; it is irregular in shape, the edges are sharp cut, and often undermined, its surface is uneven, whitish, pultaceous; it secretes an abundant purulent discharge, which is readily auto-inoculable, and, therefore, the chancroid is usually multiple. Pain is a prominent symptom. There exists no characteristic induration, such as is met with in the infecting sore, but, exceptionally. the lesion is accompanied with an œdematous inflammatory swelling, which, in a -measure, resembles the specific induration of a chancre. This is more especially the case when any irritant has been applied to the sore, such as a caustic. It, however, differs from the chancre induration, in that there is no marked limit to the swelling, but it gradually blends with the healthy tissues to which it is adherent; and, finally, it differs from the specific lesion, by disappearing with the healing of the sore. Again, the chancroid has no regular course; it may recover with rapidity, or it may be extremely slow in healing, enlarging and extending over a large extent of surface, in fact, becomeing phagedenic. No protection of the system is afforded against a second attack by a previous infection. Inflammation and suppuration of the neighboring lymphatic glands is a very frequent complication of the chancroid. The histology of the chancroid presents nothing characteristic of the lesions; it is an ulcerative process, due to an inflammatory action, and therefore results in a loss of substance. No distinction can be histologically made between a chancroid and an ulcer due to any irritant which occasions inflammation and ulceration.

A sore with the above history, and presenting the symptoms I have enumerated, may generally be regarded as a local non-infecting lesion and treated as such; but, as previously mentioned, it may possibly be followed by constitutional symptoms, and therefore, while giving all encouragement of a hopeful kind, it is well to be cautious in expressing any positive opinion. A case in point recently came under my observation. Two men had connection with the same woman, in immediate succession. During the following week they both presented themselves to me, and upon both, in the furrow between the glans penis and prepuce, were seen painful, irregular, multiple, and profusely discharging purulent sores. The same treatment was applied to both, and they both progressed favorably for a certain time. Their termination, however, differed; one, he who had connection with the woman first, entirely recovered; the other, about three weeks after the exposure, returned with the sores unhealed, and, upon examination, quite a different state of affairs was seen. There was in the preputial furrow a sore presenting very markedly all the objective symptoms of an indurated chancre; also the characteristic indurated inguinal glands of lymphatic contamination were observed. Here I have no doubt constitutional syphilis will eventually follow in due time; as yet the systemic involvement has not made itself manifest. Such cases, although they are seldom met with, should teach us that caution in expressing our opinion cannot be too rigorously observed.

Fortunately the treatment of the venereal lesions does not, in either case, materially affect the result. That is to say, it matters but little whether we have to do with a simple local venereal sore, or a sore which will be followed by syphilis. In both the same method of treatment is now advised by most writers upon the subject. In both the thera-

peutics is to be strictly local, but it is as to the nature of the local treatment that there arises a difference of opinion. One author advises us to cauterize every case; another rarely employs this method, and only to meet special indications.

The application of cauterizing agents to venereal sores has always been one of the methods of treatment in this affection. The reasons for its adoption can readily be understood, when we remember that, previous to the separation of venereal sores into two classes, the infecting and non-infecting, it was noticed that very often constitutional contamination did not supervene, and it was generally believed that the destruction of the virus contained within the sore by the cauterizing agent had prevented such contamination. Now, however, we know that it was not the treatment which prevented an outbreak of syphilis, but no infection had taken place, and therefore there had been no preventive treatment.

After the division of venereal sores into infecting and non-infecting, the application of caustics has been continued, on the ground that each variety of sore contains within itself a specific virus. That this is true of the infecting variety none deny; but that there exists any specific element in connection with the non-infecting sore is a question which, at the present time, is disputed by a few authors. I do not propose now to enter into a discussion upon the specificity or non-specificity of the chancroid, but may say that a study of the subject has led me to think there still is room for investigation, and that, viewing the subject from a therapeutical standpoint alone, the specific nature of the chancroid, as far as my experience goes, need not be admitted. My reason for adopting this view of the subject is based upon the investigations of a practical kind which I have carried out during the past year. Within this period there came under my observation seventeen cases of chancroid; of these five were treated by caustics previous to coming under my care, thus leaving twelve cases which I saw from the beginning to the end. Among this number the different varieties were met with, as single, multiple, concealed, etc., thus offering a favorable opportunity for my investigations.

From frequent employment of the cauterizing agents in this lesion, I had seen some of the disadvantages they occasioned, and more particularly the pain. This is always severe and at times intense, notwithstanding the use of a local anæsthetic, such as carbolic acid, previous to the caustic application. The administration of ether or chloroform to produce general anæsthesia is, in my opinion, not admissible in such cases, except in rare and unusual circumstances. If, therefore, the same results could be obtained by not applying any such severe means of treatment, it certainly would be a great gain, and from the fact that such a claim had been made, a trial of the method advocated by those who do not employ caustics seemed at least justifiable. Therefore, I determined to omit all cauterizing agents in my treatment of the chancroid, provided no ill-effect arose from the omission.

The number of cases treated, as above stated, were twelve, and in none did I find it necessary to resort to any cauterizing agent, in none did any complication arise during treatment, and in all a favorable termination was the result. One of the greatest difficulties the surgeon will meet with in following out this method of treatment is the patient himself.

Such a firm hold has the caustic treatment, not only upon the medical mind, but equally so upon the public, that the patient is not satisfied unless you "burn" his sore, and you must constantly call his attention to the progress the sore is making towards recovery, in order to reconcile him to the non-cauterizing treatment. Having succeeded without "burning," I doubt if you ever will be able to convince a patient of the necessity of a caustic, if he should be so unfortunate as to contract another chancroid.

It could scarcely have been a coincidence, but it is the fact, that in not a single case in which the cauterization was omitted was the lesion complication by an adenitis. While, on the contrary, in four or five cases which had been cauterized previously to coming under my observation, there was developed, or there existed at the time they presented themselves for treatment, a suppurating adenitis or periadenitis.

One of the most important, and for some the only reason that cauterizing agents are applied to the chancroid, is to prevent auto-inoculation, or a multiplication of the sores. There is no doubt but that a thorough application of a caustic will prevent auto-inoculation. The remedy is very severe, and frequently complicates the lesion by occasioning a very intense local inflammatory action, and also, to my mind, the exciting cause of the sympathetic adenitis in many cases. That such cauterization is unnecessary, and that auto-inoculation may be prevented by other means, is demonstrated from the results obtained in my cases. In none was there any increase in the number of sores after treatment had been commenced.

Those who advocate the non-cauterizing method of treatment of the chancroid, regard the lesion as an ulcer, which may be caused by any irritant, and in this case the irritant is an acrid pus, coming in contact with a special part of the body, which, from its peculiar histological structure, is liable to develope the special form of ulcer characteristic of the chancroid. Therefore, they claim that the treatment applicable to ulcers in general is equally suitable for the chancroid. Thus anodynes, sedatives, astringent and stimulating applications have each their sphere of action in assisting nature to heal the lesion. The kind of medication to be employed will depend upon the symptoms presented by the sore, and judgment in the selection of the remedy is a very inportant element in obtaining success.

No definite rule can be given for the treatment of every case, but where there is no complication, the sore presenting the typical symptoms, the treatment which I have employed and found satisfactory, may be stated as follows: The discharge from the lesion is, as far as possible, to be prevented from collecting upon and around the sore; this may be done by frequent washings with water. The surface of the sore is kept dusted with iodoform, and is covered with a pledget of absorbent cotton. The simplicity of this treatment is a stromg recommendation, and I can answer for its efficiency. Let me here say, the employment of iodoform is not from any supposed specific action of this drug; but, on account of the favorable impression it exerts upon any ulcerated surface. An objection, and a very serious one, to the iodoform application, is its penetrating, lasting and extremely unpleasant odor. This, however, can in a great measure be obviated by exercising great caution, in its application, not to permit any of the powder to come in contact with the patient's clothing; confine your dusting exclusively to the ulcerated surface, and carefully cover the part with cotton. A few drops of oil of rose added to the iodoform is also of service in masking its odor.

Where the iodoform treatment cannot be used, on account of some complication, such as a contracted prepuce, or intense inflammatory action, or refusal of the patient, then the other forms of medication may be resorted to, selecting such as the symptoms of the sore seem to indicate. I am inclined to think the advantage of the idoform treatment over others is to be found only in the greater rapidity with which the process of healing progresses.—*Philadelphia Polyclinic.*

THE TREATMENT OF CROUP AND DIPHTHERIA

BY INHALATION OF THE FUMES PRODUCED BY THE COMBUSTION OF A MIXTURE OF TURPENTINE AND COAL-TAR.

Dr. Delthil, of Nogent-sur-Marne (Seine), in a memoir presented to the Academy of Medicine at Paris, March 25th, 1884,* advocates, in the most enthusiastic terms, the treatment of diphtheria by a method which he claims to be "specific" for diphtheria have been so often and so confidently urged upon the notice of the profession, only to fall into desuetude when tested by more extended experience, and with a more critical spirit than has fallen to the share of their advocates, that physicians will naturally look with suspicion upon what seem *a priori* to be extravagant claims. Nevertheless, a careful perusal of this memoir cannot fail to impress the reader with the modesty, sincerity and accuracy of the author; qualities which, joined to the honorable titles he holds, require at our hands a careful and conscientious consideration of the facts and arguments he sets forth. The writer confesses to having arisen from the study of Dr. Delthil's brochure with a strong prepossession in favor of the author, and a decided disposition to test the practice upon suitable occasion.

Assuming the verity of the theory, "universally held as demonstrated," of the parasitic origin of diphtheria, Dr. Delthil propounded to himself the following question: "What microbicide may we employ, which, with disintegrating powers upon the false membrane, will conjoin the property of penetrating the system by means of the respiratory tract, and which, without danger to the economy, can reach and combat the generalized diphtheritic poison?" After a lengthy series of experiments, he has made choice of essence of turpentine, as combining in itself all the desiderata. Thus, it will detach and disintegrate the diphtheritic exudation (Laboulbene); it is a parasiticide whose virtue needs no more to be demonstrated (Bouchardat); and it can be employed in the requisite quantity without danger to the economy.

The next point to be solved was the best method by which to apply the remedy. His experiments in this direction have been prosecuted more than eight years. He has used nebulizations of turpentine; direct applications to accessible parts; the introduction of liquid turpentine into the larynx by means of a syringe; the evaporation of hydrocarbons from a receiver of turpentine, contained in a waterbath, at a temperature of 50° to 60° (Centigrade). None of these methods proving satisfactory, he resorted for a long while to the following:—

In the patient's apartments were placed several large dishes, each containing a kilogramme of coal-tar seven or eight tablespoonfuls of oil of turpentine and about one hundred grammes of oil of cajuput. This mixture was allowed to evaporate. Besides this, he threw upon hot coals, every hour, a quantity of a powder containing equal parts of benzoin and coal-tar, and subjected the patient to fumigation with the vapors thus produced. In addition, accessible parts were washed with a solution of coal-tar and with lime-water.

He obtained from these methods very satisfactory results, but not sufficiently conclusive to warrant publication. He was struck, however, by the notable diminution in his practice of cases of laryngeal croup necessitating tracheotomy.

The great objection to the practice lay in the fact that, together with the respirable and beneficial vapors, there were also disengaged traces of creasote and of acrolin, disagreeable and unsuitable for respiration, and producing in some instances a sort of suffocation.

For these reasons he was led to modify his procedure; and for the benefit of all interested he has given the unsuccessful and partially-successful plans, as well as that which he now feels warranted in laying before the profession as a specific treatment for diphtheria.

* D'un Traitment spécifique de la Diphthérie, par la combustion d'un Melange d'Essence de Térebenthine et de Goudron de Gaz. Paris, H. Lauwereyns, April, 1884.

Persuaded that the carbides liberated by the combustion of turpentine and of gas-coal-tar are capable of absorption without danger, and that they penetrate the respiratory tract; believing, too, that this is equally true of the free carbon carried up by the vapors, as demonstrated by the anthracosis of miners, he conceived the idea of setting fire to the mixture of tar and turpentine. This produced the happiest results. Rapidly the false membranes become softened, the catarrhal period is established in a few minutes, and, particularly remarkable, the fumes, though so thick as to obscure the light, do not produce cough.

The volatile hydrocarbons and other empyreumatic products, impregnate the mouth, the nasal fossæ, the larynx, the trachea and the bronchi. The patient seems enveloped in a kind of tarry varnish. The false membranes, softened, disintegrated, and covered with carbon, are easily expelled. Turpentine is essentially assimilable, says Dr. Delthil, by the respiratory mucous membrane, as is demonstrated by the odor it transmits to the urine of painters. Under the influence of these fumigations the urine of his patients acquires, with rapidity, the odor of violets. The drug traverses the whole economy, and is eliminated by the natural filter of the kidneys, playing the rôle of a parasiticide throughout the whole organism.

Five cases of diptheria have come under the author's observation since the adoption of his latest method. Recovery has taken place in all. Two cases are recorded at length. In both of these tracheotomy was necessary; but Dr. Delthil thinks that it should have been a useless operation without the employment of the turpentine and coal-tar fumigations. In one case, that of a child of four and one-half years, at the time he was called in consultation the false membranes filled all the base of the throat, and laryngeal croup menaced the patient with asphyxia. The child was cyanosed, the supra-sternal recession was extreme, anæsthesia pronounced, agitation excessive, the voice was extinct, the croupal cough infrequent. An old wound on the right hand had become covered with diphtheritic exudation. There was albuminuria. Tracheotomy was thought of as a desperate resource, and the time for operation fixed at 11 P. M., it being then 10 P. M. Meanwhile, thinking the fumigations could but prove beneficial, he made resort to them. In less than an hour, such an extraordinary amelioration took place in all the symptoms that it was decided to postpone the operation. The day passed well. Respiration was re-established, the croupal cough resumed its characteristic intensity, but with a decided catarrhal *timbre*. The child was able to take nourishment. A partial extinction of respiratory murmur in the right lung indicating obstruction of the origin of the right bronchus, he began to fear an ascending croup. These fears were verified, and the urgent symptoms returned on the eleventh day of the disease, four days after the first menace of asphyxia, so happily dissipated. Thinking to gain more direct access for the vapors, he now proposed tracheotomy to the family, but they declined. A few hours later, however, they begged him to operate. Though he felt that the case was desperate, as he would find only a canal completely blocked with false membranes, he consented. After having incised two rings of the trachea, it was necessary to incise two more, in order to find entrance for the canula, so abundant was the exudation. The suffocative symptoms were but slightly diminished; under ordinary circumstances death would have occurred after but a brief delay. As a supreme resource he fired his mixture; the fumes became disengaged with an intensity that hid each one in the apartment from the view of the others. In a few moments the false membranes became diffluent, and under the eyes of eight observers a mass of disintegrated, membranous flakes covered with carbon, poured out through the canula. Dr. Delthil feels justified in asserting that in the absence of the fumigations the operation would have been futile, and the child would have been asphyxiated, even at the moment the canula was inserted.

The other case detailed is, in some respects, even more remarkable than this.

Dr. Delthil calls attention to the prophylactic virtue of his fumigations, as exemplified by the uniform escape from contagion of parents and attendants, and the healing without ill-result of a wound received by himself during operation.

He is endeavoring to perfect the apparatus for the employment of his treatment, which is at present very primitive. Meanwhile, he wisely cautions against the risks of fire. The receptacle of the mixture to be ignited must be surrounded by an additional vessel, to prevent accident, in case the first one should be broken by the intensity of the combustion. The two vases must be placed on the floor in the middle of the room. All inflammable objects are to be removed.

The large bottle or other vessel containing the stock of turpentine must be removed from the room; and nothing must be added during the combustion of the mixture. The flames may be extinguished at will by casting over the vessel a woolen cloth.

The proportions recommended by Dr. Delthil are as follows—to be modified according to exigencies: Gas-coal-tar (Norwegian tar will not answer; better use turpentine only), 200 grammes; essence of turpentine, 60 grammes; or the same of turpentine alone. The mixture to be renewed every two or three hours, according to the gravity of the case, and the amelioration produced.

We summarize the following from his conclusions: The fumes are easily supported by the persons in attendance upon the patient, and, indeed, benefit these persons by virtue of their prophylactic influence. Resorted to in time, this treatment will obviate the necessity of tracheotomy; and in old, desperate cases, will transform

that operation from a hopeless last resource, to an almost certain remedial measure.*

Although we cannot accept Dr. Delthil's treatment as a *specific* for diphtheria, the facts before us seem to show that it is likely to prove beneficial in a large number of cases. It certainly deserves trial.—*S. Solis-Cohen in Philedelphia Polyclinic*

INTESTINAL INDIGESTION.

A Clinical Lecture Delivered at the Children's Hospital, Philadelphia.

By Louis Starr, M.D., Lecturer on Diseases of Children in the Post-Graduate Course of the University of Pennsylvania. Reported by Wm. H. Morrison, M.D.

Gentlemen :—The previous history of the little patient before you is very incomplete, since we can learn nothing except that she has been in bad health for some time. She is eight years old, and sufficiently tall for her age, but her face and limbs are thin. The muscles, however, are firm, and the skin is only slightly deficient in softness and flexibility. Her general strength is fair. The cheeks, as you will notice, have a moderately good, red color, and there are no dark rings around the eyes, although, if you will look closely, you will see that the conjunctivæ have a distinctly yellow tinge. Her tongue is perfectly clean, the papillæ normal, and the mucous membrane of the mouth healthy. Her appetite is good, there is no increased thirst, and she has neither vomiting nor eructations of flatus or sour liquid. She does not complain of abdominal pain, and the bowels are said to be opened daily; but I am inclined to doubt this statement, for the belly is very greatly distended, and you will at once be struck with the contrast which this part of the body bears to the rest. While thus markedly altered in size, the abdomen is painless on palpation, and percussion elicits a tympanitic sound, showing that the enlargement is due to gaseous distension and not to the presence of a solid tumor. The hepatic and splenic dulness are not increased. The heart and lungs are free from disease, there is no alternation in the pulse or surface temperature, and the urine is voided freely.

Now, what conclusions can be drawn from the points elicited in this case? In the first place, we can say positively that there is no gastric disorder, for the tongue is perfectly clean, the appetite good and neither eructation, increased thirst, nausea nor vomiting is complained of. Still, the only symptom presented, viz., the uniform, great gaseous distension of the abdomen, indicates deranged digestion; consequently, we must look to the intestinal canal, or its accessories, for an explanation of the trouble. As already indicated, it is difficult to account for the absence of abdominal pain and disordered action of the bowels under the circumstances; but since these symptoms are denied by the patient, let us see if the meteorism can be referred to any other cause than simple intestinal indigestion. The abdomen is uniformly distended, is painless on palpation, there are no indications of a tumor, and very little constitutional disturbance, so that we may at once put intestinal obstruction from intussusception or fecal accumulation, for instance, out of the question. Sometimes, in ataxic cases, the muscular coat of the intestine, sympathizing in the general debility, ceases to afford the normal resistance to the contained gases, and these expanding greatly distend the gut; but this cause cannot be acting here, for the patient is but little below par. Caseation of the mesenteric glands (tabes mesenterica), especially when complicated, as it frequently is, with ulceration of the bowels, has meteorism for one of its symptoms; but there is at the same time diarrhea and all the signs of chronic interference with the nutritive processes. Under such conditions the child wastes and grows pale and feeble, the face looks haggard, the sleep is disturbed, the appetite is capricious, and thirst increased. Dilatation of the abdominal veins is often noticed, and occasionally edema of the feet and legs is met with, while the discovery of an irregularly-shaped, slightly movable tumor in the umbilical region makes the diagnosis certain. These symptoms are entirely different from those presented by this case.

We are entirely justified, then, in attributing the meteorism to intestinal dyspepsia, which is the most common cause of abdominal distension in children.

Let us next study the manner in which the symptom is produced. There are no indications of impaired gastric function, and I think that we can assume that, as far as the stomach is concerned, the work of digestion is well done; but you know that only the albuminous articles of the diet are digested in the stomach, that a part even of this class of food passes the pylorus unaltered, and that the starches and fats are unaffected by the gastric secretions. In the intestine, therefore, some of the albumen and all of the starch and fat of a meal must be digested. This is mainly accomplished by two secretions poured into the upper part of the duodenum, namely, the bile and the pancreatic juice; of these the first takes the lesser part, merely assisting the gastric digestion and helping to emulsify the fats—the bulk of the work falling upon the second.

The pancreatic juice contains four ferments : *a*, trypsin, which converts albuminous matter into peptones; *b*, curdling ferment, which curdles the casein of the milk; *c*, pancreatic diastase, which changes into sugar and dextrine, and *d*, emulsive ferment, which emulsifies and partly saponifies the fats. The major part of digestion is, therefore, accomplished in the intestine, and the pancreatic secretion is the most powerful and important agent;

* Since the above was in type, we notice [*Med. and Surg. Reporter*, Philadelphia, July 5th, 1884, from *Deutsche Med Zeit.*, May 22d, 1884,] that Dr Delthil has employed these fumigations in four additional cases in which tracheotomy had been performed for laryngeal diphtheria. One case recovered. Dr. Féréol resorted to the method in the treatment of one adult, who recovered. This makes, altogether, ten cases, with seven recoveries. In six of the cases tracheotomy was performed, with three recoveries. These statistics, so far as they go, are quite favorable.

consequently, if this gland is at fault, if its secretion is diminished in quantity or poor in quality, more or less of each meal will remain in the intestine undigested, notwithstanding the fact that gastric digestion may be perfect.

You know, from a former lecture, that this undigested food, lying like a foreign body in the gut, irritates the delicate mucous membrane, causing catarrh with its uniform result, a hypersecretion of mucus; and, from what has just been stated, you will infer that starch is one of the substances most likely to be imperfectly digested. There is present, then, a fermentable substance, starch, a ferment, mucus, and one of the encouraging conditions of fermentation, an elevated temperature. Of course but one result can be expected, fermentation is set up, carbonic acid gas is liberated, and the intestine becomes distended.

As this explanation implies a catarrh of the intestinal mucous membrane, it would be interesting and satisfactory if we could find some proof of the existence of this condition in our patient. Constipation and the presence of mucus in the fecal evacuations, the common pathognomic symptoms, are wanting; but look again at the eyes: the conjunctivæ are, as you observe, quite yellow, indicating a slight degree of jaundice. Now jaundice, both in children and in adults, is most frequently catarrhal in its origin. In other words, it is due to more or less complete obstruction of the common bile duct by catarrhal swelling of the mucous membrane with the accompanying increased production of mucus; a lesion which is usually simply an *extension* of a pre-existing catarrh of the duodenal mucous membrane. Here, then, is the evidence which I think establishes the diagnosis.

For the successful management of this case a careful regulation of the diet is important. The starches and fats must be excluded, because they are digested in the intestine, and it is this portion of the digestive tract which we have found to be at fault; the starches are also unsuitable, on account of their liability to undergo fermentation, with the production of gas, and a consequent increase of the abdominal distension. Three meals a day of the following articles of food should be taken. For breakfast, at 7.30 a.m., a bit of fresh fish, or the lean of a mutton chop, or a piece of tender beefsteak, with milk (either warmed or not, according to taste), and a single thin slice of stale bread, without butter. For dinner, at 2 P.M., the soft part of half a dozen oysters, a bowl of meat broth entirely free from fat, or, instead of this, a piece of lean beefsteak, roast mutton or beef, a little spinach, or well-boiled cauliflower tops, and not more than a single slice of thin, unbuttered bread. For supper, at 7 o'clock in the evening, one or more glasses of milk, with a single slice of unbuttered bread. For drink, she must take nothing but filtered water.

The medicinal treatment must be directed to the improvement of the impaired intestinal digestion; and, as this has been traced to an inactive pancreatic secretion, we must endeavor to artificially supply the deficiency. Just as in cases of stomach dyspepsia, due to alterations in the gastric secretion, we administer with the food pepsin and muriatic acid, or supply an artificial gastric juice. Within the past few years a number of preparations have been introduced, purporting to contain the active principles of the pancreatic juice. One of these, Fairchild's Extractum Pancreatis, I have lately used extensively, and so far with very satisfactory results. To obtain these results, however, several things must be borne in mind: first, that the normal pancreatic juice is alkaline in reaction, and that acids greatly impair, if they do not actually destroy, the activity of its ferments; second, that in health, the pancreas throws out its secretion most freely from two to three hours after a meal has been swallowed, or about the time that the food is passing from the stomach into the small intestine; third, that at this time the contents of the stomach are still acid in reaction. These facts show us that, to be of any service, the Extractum Pancreatis must be given at the proper time, two and a half hours after taking food, and must be safely conducted through the stomach, a feat accomplished only by guarding it with a full dose of an alkali, as bicarbonate of sodium.

The proper dose for a child of the age of our patient is 2½ grains. I shall order her the following prescription:

℞ — Ext. Pancreatis, gr. xxx.
Sodii Biearb., ʒ j.
M. et fit., chart, No. xij.

Sig. One powder to be taken 2½ hours after each meal.

Nux vomica is also indicated, partly to give tone to the muscles of the intestine, which must be in some deeree weakened by the constant distension, and partly to encourage proper glandular action. I shall therefore order three drops of tincture of nux vomica with a teaspoonful of compound infusion of gentian, before each meal.

Finally, to assist in the reduction of the abdominal distension, it will be well to rub the belly thoroughly twice a day with a stimulating liniment, such as turpentine and olive oil, one part to three. —*Archives of Pediatrics.*

COCAINE AS A LOCAL ANÆSTHETIC.

Dr. Koller, of the Vienna General Hospital, has quite recently discovered in cocaine a valuable agent for the production of local anæsthesia. He found that the introduction of from one to three drops of a two per cent. watery solution of cocaine into the corneal chamber rendered both the conjunctiva and cornea completely insensitive, so that, for instance, the cornea could be partially gouged without exciting any reflex action or sense of pain. The same fact was demonstrated by Drs. Brettauer and Becker at the recent Ophthalmological Congress. Koller in his first report mentioned the employment of the same agent in the production of anæsthesia of the larynx.—*Lancet*, October 4, 1884.

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INSANE ASYLUMS IN THE PROVINCE OF QUEBEC.

Among the many distinguished men who visited Canada, to attend the meeting of the British Association for the advancement of Science, was Dr. Daniel Hack Tuke, editor of the *Journal of Mental Science*, and an alienist of acknowledged celebrity. As was natural, he was desirous of seeing how the insane were treated in Canada, and as Montreal was the place where he first sojourned for a limited period, the Insane Asylum at Longue Pointe, within a few miles of the city, was the first Institution for the reception of the insane which he visited. He was accompanied in this visit by Dr. Henry Howard, the Government Visiting Physician to the Asylum, and Dr. George Ross, editor of the *Canada Medical and Surgical Journal.* He subsequently visited the Asylum at Beauport, near Quebec, and as he journeyed through Ontario he visited several of the Asylums in that Province. The opinion which he formed of the treatment which the insane were receiving at both Asylums in the Province of Quebec was, that it was lamentably behind the age, and calculated to bring us into great disrepute,—that of the Asylum near Montreal being especially of a character to be condemned. Indeed, as he detailed to his medical brethren from the British Isles what he saw, we know that the universal expression was one of astonishment that such a state of things could possibly exist among a community showing in everything else an advanced state of civilization. On his return home he embodied what he saw, and his opinion thereon, in the form of a report, which he forwarded to the Provincial Secretary of this Province. Such a report was in its nature entirely gratuitous, and its preparation clearly shows how deeply Dr. Tuke felt the unfortunate position we occupied in this matter. This report was published first by our contemporary, the *Canada Medical and Surgical Journal*, and subsequently has appeared, either complete or partially, in nearly every journal in the Dominion. Its publication has created immense excitement. We do not publish the report entire, but make room for a few extracts. After giving a general description of the building, and stating that the cleanliness of the hall, reception rooms, and *apothecaire*, were such as to attract attention he says:

"It is as we ascend the building that the character of the accommodation changes for the worse. The higher the ward the more unmanageable is the patient supposed to be, the galleries and rooms become more and more crowded, and they look bare and comfortless. The patients were for the most part sitting listlessly on forms by the wall of the corridor, while others were pacing the open gallery, which must afford an acceptable escape from the dull monotony of the corridor. The out-look is upon similar galleries in the quadrangle at the back of the building; and to a visitor the sight of four tiers of palisaded verandahs, with a number of patients walking up and down the enclosed space, has a strange effect. These outside galleries are, indeed, the airing courts of the asylum. There are no others. If the patients are allowed to descend, and to go out on the estate, they do so in regular order for a stated time, in charge of their attendants, like a procession of charity school children. Those who work on the farms must be the happiest in the establishment."

"In the fourth tier were placed the idiots and imbeciles—a melancholy sight necessarily, even when cared for and trained in the best possible manner, but especially so when there is no attempt made, so far as I could learn, to raise them to a higher level or educate them. If, however, they are kindly treated and kept clean, I should feel much less regret for educational neglect than I should feel pained by the state of the patients and their accommodation in the parts of the establishment next described. Far be it from me to attribute to these Sisters of Charity any intentional unkindness or conscious neglect. I am willing to assume that they are actuated by good motives in undertaking the charge of the insane, that they are acute and intelligent, and that their administrative powers are highly respectable. **** It is the

farming out of *human* beings by the Province to these or any other proprietors against which I venture to protest."

"It is impossible to convey an adequate idea of the condition of the patients confined in the gallery, in the roof, and in the basement of this Asylum. They constitute the refractory class—acute and chronic maniacs. They, and the accommodation which has so long been provided for them, must be seen to be fully realized. To any one accustomed to a well-ordered institution for the insane the spectacle is one of the most painful character. In the course of seven-and-thirty years I have visited a large number of asylums in Europe, but I have rarely, if ever, seen anything more depressing than the condition of the patients in those portions of the Asylum at Longue Pointe, to which I now refer. I saw in the highest story that in the roof, an ill-lighted corridor, in which sixty to seventy refractory men were crowded together; some were walking about, but most were sitting on benches against the wall or in chairs fixed to the floor, the occupants being secured to these restraint-chairs by straps. Of those seated on the benches or pacing the gallery, a considerable number were restrained by handcuffs attached to a belt, some of the cuffs being the ordinary iron ones used for prisoners, the others being leather. Restraint, I should say in passing, was not confined to the so-called refractory wards for instance, in a lower and quieter ward, a man was tightly secured by a straight waistcoat. Dr. Howard had him released, and he did not evince any indications of violence. It was said he would tear his clothes—a serious matter in an asylum conducted on the contract system! The walls and floor of the corridor in the roof were absolutely bare. But if the condition of the corridor and the patients presented a melancholy sight, what can be said of the adjoining cells in which they sleep and are secluded by day? They are situated between the corridor and a narrow passage lighted by windows in the roof. Over each door is an opening the same length as the top of the door, and 3 to 4 inches in height, which can be closed or not as the attendant wishes. This aperture is, when open, *the only means* of lighting the cell. The door is secured by a bolt above and below, and by a padlock in the middle. In the door itself is a *guichet* or wicket, secured, when closed, by a button. When opened, a patient is just able to protrude the head. There is, as I have intimated, no window in the room, so that when the aperture over the door is closed it is absolutely dark. For ventilation, there is an opening in the wall opposite the door, which communicates above with the cupola; but whatever the communication may be with the outer air, the ventilation must be very imperfect. Indeed, I understood that the ventilation only comes into operation when the heating apparatus is in action. What the condition of these cells must be in hot weather, and after being occupied all night, and, in some instances, day and night, may be easily conceived. When the bolts of the door of the first cell which I saw opened were drawn back and the padlock removed, a man was seen crouching on a straw mattress rolled up in the corner of the room, a loose cloth at his feet, and he stark naked, rigorously restrained by handcuffs and belt. On being spoken to, he rose up, dazzled with the light, and looking pale and thin. The reason assigned for his seclusion and his manacles was the usual one, namely, 'he would tear his clothes if free.' The door being closed upon this unfortunate man, we heard sounds proceeding from neighboring cells, and saw some of their occupants. One, who was deaf and dumb as well as insane, and who is designated *'l'homme inconnu,'* was similarly manacled. In his cell there was not anything whatever for him to lie or sit upon but the bare floor. He was clothed. Some of the cells in this gallery were supplied with bedsteads, there being just room to stand between the wall and the bed. When there is no bedstead, a loose paliasse is laid on the floor. In reply to my enquiry, the Mother Superior informed me that it was frequently necessary to strap the patients down in their beds at night."

"Passing from this gallery, which I can only regard as a 'chamber of horrors,' we proceeded to the corresponding portion of the building on the female side. This was to me even more painful, for when, after seeing the women, who were crowded together in the gallery, on benches, and in fixed chairs, many of whom were restrained by various mechanical appliances, we went into the narrow passage between the cells and the outer wall, the frantic yells of the patients and the banging against the doors constituted a veritable pandemonium. The effect was heightened when the *guichets* in the doors were unbuttoned, and the heads of the inmates were protruded in a row, like

so many beasts, as far as they could reach. Into this human menagerie what ray of hope can ever enter? In one of the wards of the Asylum I observed on the walls a card, on which were inscribed words to the effect that in Divine Providence alone were men to place their hopes. The words seemed to me like a cruel irony. I should, indeed, regard the Angel of Death as the most merciful visitant these wretched beings could possibly welcome. The bolts and locks were removed in a few instances, and some of the women were seen to be confined by leathern muffs, solitary confinement not being sufficient. One of the best arguments in favor of restraint by camisole or muff is that the patient can walk about and need not be shut up in a room, but we see here, as is so often seen, that unnecessary mechanical restraint does not prevent recourse being had to seclusion. A cell, darkness, partial or total, a stifling atmosphere utter absence of any humanizing influence, absolute want of treatment, are but too often the attendants upon camisoles, instead of being dispensed with by their employment. When such a condition of things as that now described is witnessed, one cannot help appreciating, more than one has ever done before, the blessed reform in the treatment of the insane which was commenced in England and France in 1792, and the subsequent labors of Hill, Charlesworth and Conolly. But it is amazing to reflect that, although the superiority of the humane mode of treating the insane, inaugurated nearly a century ago, has been again and again demonstrated, and has been widely adopted throughout the civilized world, a colony of England, so remarkable for its progress and intelligence as Canada, can present such a spectacle as that I have so inadequately described as existing in the year of grace 1884, in the Montreal Asylum."

"Before leaving the Asylum, I visited the basement, and found some seventy-men and as many women in dark, low rooms. Their condition was very similar to that already described as existing in the topmost ward. A good many were restrained in one way or another, for what reason it was difficult to understand. Many were weak-minded, as well as supposed to be excitable. The patients sat on benches by the wall, the rooms being bare and dismal. A large number of beds were crowded together in a part of the basement contiguous to the room in which the patients were congregated, while there were single rooms or cells in which patients were secluded, to whom I spoke through the door. The herding together of these patients is pitiful to behold, and the condition of this nether region in the night must be bad in the extreme. I need not describe the separate rooms, as they are similar to those in the roof. The amount of restraint and seclusion resorted to is of course large, yet I was informed that it was very much less than formerly."

Writing of his visit to the Asylum at Beauport he also complains of the system of restraint followed there, and condemns many of the architectural arrangements of the building. He then says:

"But it is needless to describe in more detail an institution which, however willingly I may praise where praise is due, is so radically defective in structure and so fundamentally different from any well-conducted institution of the present day, in the matter of moral, to say nothing of medical, treatment, that no tinkering of the present system will ever meet the requirements of humanity and science. I regret to say thus. It is a thankless task for a visitor, courteously treated as I was, to criticize any institution which the officers permit him to inspect. But I write in the hope of helping, in however humble a way, to bring about a reform in the injurious practice of the State contracting with private individuals for the maintenance of its insane poor."

In this last sentence Dr. Tuke has struck the chord responsible for all of which he complains. There is no use for us to attempt to hide the matter now. This is not the first time that public attention has been called to this state of things, but as it came from persons residing here, it did not excite the public pulse. Now, without any exaggeration, throughout the entire civilized world, we are held up as being a Province most lamentably behind the age in the treatment of our insane. It is absolutely useless, and folly of the most senseless description, for any one to attempt to bring into this matter—as has been done by a few French newspapers—the fact that Dr. Tuke, being a Protestant, wrote with a view of injuring the nuns. There are but few Protestants in the present day who do not hold these estimable ladies in the very highest respect. But such an opinion is quite compatible with the belief that to farm out to them the insane poor is folly of the worst description. One can hardly imagine nearly, if not quite, one thousand insane,

huddled together in a building totally inadequate, according to Dr. Tuke, for such a number; all these really under the sole direction of a lady—the Superioress,—endowed with administrative ability possessed by but few—but totally destitute of that peculiar information so necessary for one at the head of an Insane Asylum. The medical attendance at Longue Pointe is also totally inadequate, and not of a description to receive public confidence. The visiting physician, Dr. Henry Howard, is not referred to by this statement, for his powers are not medical, but administrative. Place that gentleman in a position at the head of an Asylum, with supreme authority, and we are satisfied, from what we know of him, he would give us an asylum that would be an honor to our Province. We do, however, refer to Dr. Perreault. He is a physician doing a practice in the neighborhood, and is thoroughly qualified for general practice. But the day for a general practitioner to also practice as an alienist is passed. This gentleman should either devote his whole time to his insane patients, for which he should be adequately paid, or he should give up his appointment. To attend to one thousand patients, and give the time necessary for the study which such a position entails, is even more than one man can accomplish, so long as a day only counts twenty-four hours, and seven or eight hours of it are required for sleep. If this is not done, we cannot but express the opinion, that the medical attendance will be unsatisfactory. Indeed such an Institution requires at least one medical superintendent with at least three medical assistants. The system is the cause of all the trouble—we farm out our insane poor. We do not know of any other country that does. We must make a change—humanity and the good name of our Province call aloud for reform. We know there are difficulties in the way; a contract exists which has ten years to run, but during that time much might be done to improve the condition of things. An editorial article is not the place in which to suggest these, but, if our Government has not the money with which to purchase the two Asylums, take them under their own management, and compensate the sisters for loss, then it should find the means for a medical commission. This commission would be able to make suggestions, the adoption of which would perhaps make the farming system at least endurable till the time the contract expires. Then beyond a doubt, we should wipe out the blot which now attaches to our fair Province of Quebec. To accomplish this, the Government will require the support of the entire population. So far as the Medical Profession is concerned, we believe it can rely upon receiving it.

THE LYNAM CASE.

What is now known as the Lynam case has attracted a very large amount of attention not only in the Dominion but in the United States. The details of it are, in brief, as follows:—Mrs. Lynam, living with her husband and children in the city of Montreal, was by the former considered to be of unsound mind and so violent that he believed his life to be in danger. Dr. Henry Howard, visiting Physician to the Longue Pointe Lunatic Asylum, was called upon to examine her, and on his certificate she became an inmate of that Institution. This was a little over two years ago. There she has remained ever since—most, if not all, of the time being confined in the refractory department. Mr. Alfred Perry, in whose employ she had at one time been, from a variety of circumstances became convinced that she was sane, and therefore wrongfully detained. Acting under a recent Act of the Quebec Legislature, he applied to Judge Jetté to have Mrs. Lynam produced in Court for the purpose of having her mental condition ajudicated upon. This order was granted, and in the interval of her appearance a number of medical men visited the Asylum to examine her condition. When proceedings began in open court, Drs. Trenholme, Wanless and Pickup (formerly medical resident at Beauport asylum), of Brockville, Ont., were examined on the part of Mr. Perry, and declared their belief in her sanity. Dr. Perrault of Longue Pointe, who is the medical man employed by the Sisters (Nuns) of the Asylum, as Attending Physician, also stated on oath that from the date of her admission up to the present time he had considered Mrs. Lynam a sane woman; that he had never made any report to the Government on the subject, although he had expressed his opinion to Dr. Henry Howard, who held the contrary view, and that he had not pressed the matter, although he still believed her sane. Dr. Howard testified that in his opinion she was insane, and at times, when excited, actually a dangerous lunatic, and in corroboration of his views produced Dr. George Ross, Professor of Clinical Medicine in McGill

University, and Dr. Cameron, at present Professor of Obstetrics in Bishop's College, but till this year, and for several years past Professor of Medical Jurisprudence in the same Medical Faculty. Both these gentlemen stated that on their first examination they were inclined to believe her sane. An interview being arranged between Mrs. Lynam and her husband, "which they saw, unseen and unknown," they both witnessed her in a state of great mental excitement, and from her conduct at this time they came to the conclusion she was insane. With such evidence before Judge Jetté, no wonder he felt bewildered, and he accordingly put Mrs. Lynam into the witness box, and, before a crowded court, gave her a most searching examination. It is but right to say that she stood the ordeal with wonderful calmness. At the same time those who believe in her insanity claim that, though calm, some of her evidence, as regards certain things she had overheard from the window of the Asylum, were nothing short of mental delusions. Here the case paused for a few weeks, when Judge Jetté announced that he felt himself unable to decide the question. He appointed Dr. Vallée, of Quebec, who occupies the position of Visiting Physician to the Beauport Asylum, to examine Mrs. Lynam, and at the same time suggested that the Quebec Cabinet should name two other experts to act with him. The Government at first objected to appointing the two other experts, but additional pressure was brought to bear, but their decision has yet been confirmed. In the meantime Mrs. Lynam remains an inmate of the Asylum. Thus the case stands at the time of our writing. We fully sympathise with Judge Jetté in the very difficult position in which he has been placed. We believe his determination to leave the case particularly in the hands of experts will, *if three experts* be named, give general satisfaction. Our experience does not enable us to analyse the evidence so as to express an opinion which would be of any value, so we content ourselves with a simple detail of the case. When the case has terminated we may express our views on certain facts which have been brought to light during the course of the investigation.

CARE OF THE INSANE.

THE ONTARIO AND QUEBEC SYSTEMS COMPARED —RESTRAINTS ALMOST DISUSED IN ONTARIO.

The following is a condensation of an interview obtained by a reporter of the Toronto *Globe* with Dr. W. F. O'Reilly, Inspector of Asylums and Prisons for Ontario, on the subject of the report of Dr. D. H. Tuke, editor of the *Journal of Medical Science* of London, Eng., and formerly Superintendent of the York Retreat for the Insane, on the asylums of Ontario and Quebec.

Dr. O'Reilly describes Dr. Tuke as a man of wide information in all matters regarding the insane and their management, and thought it quite impossible that he would misrepresent the case. He stated that the condition of matters existing in Quebec, particularly in regard to the system of restraint, could not occur in Ontario. Restraint there had been all but abolished. After a great deal of discussion, the opinion, a few years ago, began to be held by a considerable number that entire nonstraint might be successfully undertaken. On the side of restraint were ranked men of high standing and experience, but there were men equally high in standing who had put the non-restraint system in operation and had accomplished the most surprising and satisfactory results. When he personally had first entered on his official duties he had been in a general way acquainted with the restraint question, but he had since given the matter careful consideration, and was convinced that the non-restraint system was the best. He had also lost no opportunity of urging this view upon medical superintendents. Quoting from the report of Dr. Bucke, superintendent of the London Asylum, which he had just received, he showed that for fifteen months no mechanical restraint or seclusion had been used at that asylum, and that no sedative drugs had been administered. Dr. Bucke was as much surprised as any one at the success attained. The *morale* of the institution had also been revolutionized, and the basis of treatment in the London Asylum was said to be the employment of patients at whatever they were fitted for, thus securing distraction of the mind, and sleep. This treatment was found to have the result of making the patients more manageable and, so to speak, more civilized. In two years the attendance of those capable of good behavior at chapel had increased from an average of 250 to a regular attendance of over 400.

Dr. Bucke's report also states that the credit of the admirable results mentioned belong first to Dr. O'Reilly, who so persistently urged the non-restraint system upon his attention.

Dr. Metcalf, of the Kingston Asylum, Dr. O'Reilly said, reports that for nearly two years

there had not been an instance of mechanical restraint in that asylum, and the result had been such that they were not likely to go back to such treatment. Sedatives were sparingly given, however, though, instead of increasing by the reduction of mechanical restraint, they were falling off. He likewise based his hope for success in future on the employment of the patients. During the year prior to the abandoning of restraint out of a total of 430 under treatment 194 were employed, while during the past year out of a total of 581, 425 were employed.

To the farming-out system Dr. O'Rielly attributed the unsatisfactory state of affairs in the Quebec asylums. Contractors being paid so much per head for the care of the insane, it was natural for them to make as much money out of the contract as possible. In Ontario no official had any connection with asylums,directly or indirectly,and they were thus precluded from any chance of making money out of their position. The Government pays for evreything, and in the matter of food, clothing, etc., imposes no restrictions as to what shall be used, except that reasonable economy shall be used. The food furnished, while plain, is of the best quality.

In regard to cost of maintenance in Ontario as compared with Quebec, the Doctor said in Quebec the contractors received at the rate of $11 per month per patient, or $132 per year. The average cost per inmate in Ontario was $131, and they had thus an infinitely better system at an equally low rate. In the States the expenditure on lunatics is nearly double what it is here, the buildings and furnishings being much finer, and the attendants being higher paid. Their food, although no better, was in greater variety and more attractively served.

VICTORIA AND LAVAL.

Our readers will remember the difficulty which has for several years existed between those two rival medical schools. In the September number of last year we gave a synopsis of it, so need not occupy space by repeating it. It seemed to drag along as if it would never end,—now one side and then the other claiming that the victory was theirs. But the Apostolic Delegate to whom it was referred was not to be hurried. He seemed determined to make himself master of the situation before coming to a conclusion, and in this he was wise. That conclusion has, however, at last been reached, and we are pleased to say that it is favorable to Victoria. Her school is to continue, and her professors are to have the same control as heretofore at the Hotel Dieu. In a word, Victoria goes on as before. In this decision there is much which must give satisfaction to all in the profession, who know the history of this School of Medicine. Its birth and early life bear witness to the cordial friendship which existed then, and we believe exists to a great extent now, between the French and English members of the profession in Montreal. Its death would have made a breach between the French Medical Profession in this Province that in our opinion a century would not have healed. To have such a calamity averted is cause for much thankfulness, and when the irritation has been calmed down by time, we believe that the supporters of Laval will admit that the decision of the Apostolic Delegate was wise and just.

THE MONTREAL MEDICAL SCHOOLS.

The various medical schools in Montreal opened the first week of the present month, and,so far as we can gather, the attendance at all is about the same as last year. We do not look for much increase in the number attending the English schools, till the senior English medical school here learns that there is not always wisdom in monopolies. Toronto knows this well, and is profiting by it amazingly. We do not grudge that city the success which is attending her Medical schools—she acts fairly by all—and prosperity sits on the banner of each.

PHYSICAL EDUCATION.

A short time ago we noticed in the *Gazette* a letter from our esteemed *confrère*, Dr. Fenwick, reporting the highly satisfactory result of an examination he had made to ascertain the effect of gymnastic exercise in the case of eight members of Mr. Barnjum's Gymnasium. Dr. Fenwick adds the following postscript to the report above alluded to: "I must add to this my acknowledg-
" ment of the usefulness of your system of calis-
" thenics with children and young women, several
" of whom I have sent to you to receive special
" training in cases where special sets of muscles
" had become weak or wasted through disease.
" In several cases that I can call to mind during
" the past few years the greatest benefit has been
" derived from the system of instruction you have

"followed." This testimony is at once valuable and suggestive, as reminding us that in Mr. Barnjum we have a coadjutor of whose assistance we might oftener avail ourselves. In many instances medicine alone, or ordinary exercise (more often prescribed than followed), are inadequate to cure various forms of muscular debility or deformity and here the aid of one upon whom we can thoroughly depend for faithfully and intelligently carrying out a defined remedial course of exercise comes in most opportunely. There can be no doubt that rationally conducted and systematic exercise is a necessity for obtaining that full degree of healthy development which is, we regret to say rather the exception than the rule. Physical education, no less than mental education, should be begun in childhood and be carried on gradually and systematically. Were this fact more generally recognized, how much of suffering and deformity might be avoided. There is too great a tendency to cultivate the brain to the neglect of the body. This is a serious error, both should be developed equally. Better a trifle less learning and more health to enjoy and make use of it. It is undoubtedly true that medical men, in a general way, convey such idea to parents. Still there is a lamentable amount of apathy or ignorance prevailing in regard to this matter which calls for judicious and oft-repeated counsel at the hands of those who are amongst the most trusted, if not always adequately valued, friends of those who turn to them for relief when sickness and suffering invade the home circle. We are urged to put this matter strongly because we know of several instances where weak and ailing children placed under Mr. Barnjum's care became strong and healthful. Montreal is exceptionally fortunate in possessing a first-class institution for physical education, conducted by an educated gentleman, and we sincerely hope that his opportunities for usefulness may be largely increased, as the public become more awake to the value of bodily training. This awakening may be materially hastened by medical men.

MEDICO-CHIRURGICAL SOCIETY OF MONTREAL.

On the 10th October the annual meeting of this Society was held in their very comfortable rooms in Phillips Square. The attendance was large, and perfect unanimity prevailed. The following were elected officers for the ensuing year:—*President*, Dr. Roddick; *1st Vice-President*, Dr. Alloway; *2nd Vice-President*, Dr. Trenholme; *Treasurer*, Dr. Molson (re-elected); *Secretary*, Dr. Gurd (re-elected); *Librarian*, Dr. Reed; *Publication Committee*, Drs. Cameron, George Ross, Kennedy and Bell; *Council*, Drs. George Ross, Kennedy and Roger. An able address was given by the retiring President, Dr. Roger. Dr. Osler was elected as honorary member, and it was decided to present him with an illuminated address of deep regret at his departure from Montreal.

RELATIVE DIASTASIC ACTIVITY OF MALT EXTRACTS.

Recognising that the diastasic activity of Malt Extract is probably its most valuable feature, the Maltine Manufacturing Company have taken pains, not only to perfect their preparation in this respect, but also to bring out the fact by indisputable testimony. This has been most effectually done in pamphlet now before us, carrying as, it does, testimony of the highest authorities in the world of chemistry in support of their claim to diastasic excellence. This element secured, no more reliable constructive is at command of the profession for treatment of wasting diseases, notably phthisis. No doubt the pamphlet referred to has been generally circulated amongst the profession, but if any have failed to secure copy they can do so by addressing post card to Mr. H. P. Gisborne, 10 Colborne street, Toronto.

Local and General.

CONDUCTED BY P. A. LAVER, M.D.

A branch of the London (Eng.) Society for Psychical Research has been started in Montreal, and would be pleased to hear of facts bearing upon the theory of the intercommunication of thought or consciousness without any visible medium. Commenting on the aims of this Society a Montreal paper gently chides the profession for not taking an interest in such matters, and predicts that when the study of psychology is more general among the doctors that they will be brought to see the error of their ways. I doubt it. If we are to take as samples of the stories from which the Society draws its inferences relative to spiritual

things those published lately in the Montreal *Witness*, psychical research will not prove very seductive to the average medical student.

Not only is it much more probable that in the majority of cases the circumstances related are merely coincidences than that they have any necessary connection, but the special plea of the spiritualist is only too evident in most of them.

I would suggest that the committee of organization bear in mind a certain essay of Professor W. K. Clifford ("Ethics of Belief") while estimating the value of the evidence given by our local story-tellers. The following sentences might serve as a beneficial corrective for some of the witnesses:

"In order that we may have the right to accept a man's testimony as grounds for believing what he says, we must have reasonable grounds for trusting his *veracity*, that he is really trying to speak the truth as far as he knows it; his *knowledge*, that he has had opportunities of knowing the truth about the matter; and his *judgment*, that he has made proper use of those opportunities in coming to the conclusions which he affirms." I would also seriously recommend as a text-book for this new class in science the lecture of Tyndall on "The Scientific Use of the Imagination."

Mr. Lawson Tait, in his admirable address before the C. M. A., speaks of the custom prevalent in his time of making the grand tour of continental schools of medicine, and he, in the warmth of his heart perhaps, expressed his belief that in the future the eyes of the searcher after medical truth would be turned westward rather than to European centres of education. Are we also not too prone to consult the wise men of the East in this year of grace? The types of disease that prevail here are essentially American. Such modifications of disease brought about by climatic and race differences may be small in most instances, but they should not be ignored, and I think it is unseemly in a profession that calls itself liberal to submit to this worship of German and French authority because it *is* German and French. Does the Sun of our Science rise on the Seine and set near the banks of the Spree?

A brilliant idea has at last come to the Board of Health of this city. Hitherto vaccination of the children of the poor has been done by five public vaccinators who received about $200 each per annum, from the Corporation.

There are, doubtless, some objections to this method, but on the whole the scheme has worked well. The men appointed did their work in the neighborhood where they lived, and their knowledge of the people and the limited area assigned to each gave them a fair chance of reaching all suitable cases. Now, however, it is proposed to replace these five men by another, an assistant medical health officer, who, in addition to other duties, will be expected to do the whole work of the five who are to be dismissed.

Every Montrealer knows how worn and threadbare is this old, old story. Ever since the days of Dr. Carpenter (and his enquiry into the cause of the high infantile death-rate prevailing in this city) all sorts of testimony, lay and professional, have been given, and all kinds of remedies suggested. If the city authorities will give us a properly regulated Health Office, and if the citizens will support them in carrying and supporting effective health by-laws much may be done. Then let private enterprise supply a summer hospital or sanitarium on some accessible spot near the city and Montreal will no longer be obliged to bear the onus of being one of the most unhealthy cities (*quoad* its children) on the continent.

Yet, in spite of the "dry light" of science, the fog of sentiment occasionally obscures the mental horizon of even the medical *litterateur*.

Some time ago the critic of the *Canada Medical and Surgical Journal* was really quite shocked at the materialistic views of a writer which he was reviewing. A medical journal is hardly the place to discuss questions of religion, but it seems rather late in the day for one doctor to get lachrymose over the dreadful heterodoxy of another. I am sure we all agree with Dr. Holmes that the truth is wanting in the Latin proverb, "*Ubi tres medici ibi duo athei*," but something may be said in support of even materialism.

At the banquet given by the Profession in Montreal to the members of the Canada Medical Association Consul General Stearns gave one of those happy speeches for which he is so generally and so justly celebrated.

His reference to the dangers and drawbacks of specialism was well received by the assemblage,

and I am sure many a medical man there felt with him that the usefulness and the influence of the profession as exhibited by the "good-all-round" doctor—"the doctor that is good for everything" —are in considerable danger.

His belief that if the public are to be directed to this man for a nasal catarrh, to that one if their digestive apparatus suffers, and to the other doctor if they have a cough a great stimulus will be given to the already alarming trade in quack medicines. There can be no doubt but that certain departments of medicine and surgery will, in the large cities of populous countries, be given over to specialists, but I do not see how we can afford much of that sort of thing in a new and sparsely-settled country like Canada. More than that, I believe that, if persevered in, and if it receive the support of any large section of the profession, a few men will reap a fat harvest to the detriment of the general good.

As Dr. Sullivan (in his Presidential Address, C. M. A.) and others have pointed out, the death-rate of this province is needlessly high. This modern holocaust mainly takes the shape of an annual "slaughter of the innocents" in the cities. Dirty houses, crowded together as tenement rows, with foul-smelling drains and small yards—many of them the common receptacle of garbage and domestic rubbish for half a dozen families—all these make personal cleanliness difficult or impossible. Add to these causes the heat and discomfort of our long, hot summer days and the close stuffy atmosphere of small stove-heated rooms and the source of infantile mortality in Montreal is explained.

There is one exasperating form of Teutonomania which shows itself in the proneness of writers of a certain class to offer (and I suspect of their readers to accept without question) the unsupported dictum of some man with a German name.

And then, if it be desired to clinch the argument, let the original text be given. This is also very effective and awe-aspiring in a paper read before some Medical Society. As not more than five per cent. of the magazine readers and of the medical audience have a faint idea of what the writer is talking about in the particular instance the value of the whole argument is of course very much enhanced!

Far be it from me to undervalue the debt which we all owe to Virchow, Koch, Erb, Ziegler, Ziemmsen, and to a host of others whose names are to us as household words, but it cannot be denied that it is not to Germany any more than to France, England, or even to despised America, that we have to look for *permanent* additions to our storehouse of medical and surgical knowledge.

"Natur hat weder Kern noch Schale
Alles ist sie mit einem Male,"

says Goethe, and the observant *physician* shall not fail to discover the truths of nature whatever language he may speak or wherever he may live.

It is greatly to be regretted, for the honor of Canadian Surgery, that Mr. Lawson Tait was on board the Quebec boat when the young woman cut her brachial artery. I wonder if he considers the two doctors (one French, the other English) who vainly tried to ligate the severed vessel to be fair samples of the men to whom a too-confiding public entrust their valuable lives. Let us, however, not be too censorious, it may be that the gentlemen in question were not of those who pay *particular* attention to surgery—of the blood vessels.

What the Health Department wants, to begin with, is a respected and responsible medical chief. If the City Council would pay a man a respectable salary they would get the worth of their money in educated experience, the sort of thing needed to carry out intelligently and effectively *any* scheme of sanitary reform. As it is, the officers and employees of the Health office are at loggerheads; the work of the Department is done in a perfunctory and spasmodic fashion, and the public health suffers.

This reminds me of the story wherein a newly-fledged M.D. determines to make a specialist of himself, and in looking round for some unoccupied field of labor comes to the conclusion that the only ground left him for pre-emption was the scar caused by the wound which remained when the cord dropped off. He therefore announced that he would in future "pay special attention to diseases of and injuries to the umbilicus!"

September 30, 1884.

PERSONAL.

Dr. Wesley Mills is delivering the course on Physiology and Pathology this Session at McGill College.

Dr. Molson, of Montreal, we understand, has no intention of removing to Philadelphia, as stated last month by the *Canadian Practitioner*.

Dr. John J. Gardner, late house surgeon of the Montreal General Hospital, has been appointed Demonstrator of Anatomy in the Medical Faculty of Bishop's College.

The Glee Club of the Medical Students of Bishop's College, assisted by a few amateurs, gave a concert in Farnham, Que., on the 31st of October, in aid of a church fund.

The many friends of Dr. J. Leslie Foley, late Professor of Anatomy in Bishop's College, will regret to learn that his illness has become so serious as to necessitate his entirely giving up practice.

Dr. Osler, late Professor of the Institutes of Medicine in and Registrar of the Medical Faculty of McGill University has been elected Professor of Clinical Medicine in the University of Pennsylvania, Philadelphia, rendered vacant by the transference of Professor Pepper to the chair of Practice of Medicine. Dr. Osler has accepted the position, and left Montreal on the 7th of October, to enter upon his duties. Previous to his departure the Medical Profession of Montreal entertained him at a farewell dinner at the Windsor hotel. All the Medical Schools in Montreal were represented at the dinner, and warm expressions of regret at Dr. Osler's departure were uttered by the various speakers. The line of teaching which Dr. Osler has assumed is somewhat new to him. His friends, however, hope that he may be as successful a teacher of Practical Medicine as he has been of Physiology and Pathology. Since his arrival in Philadelphia, Dr. Osler has been warmly welcomed by his new colleagues. His departure is a serious loss to the Medical Faculty of McGill, of which he was a very active member, and it will create a vacancy on the attending staff of the Montreal General Hospital.

THE LATE DR. GEORGE W. NELSON.

Dr. Stern, of Panama, writing to us, says:

"The death of Dr. George W. Nelson, late Resident Surgeon to the Central Hospitals of the Panama Canal Company, has removed from the ranks of the Medical Profession a bright and promising ornament. During the brief period that the Canal Company had the benefit of his services he proved himself an earnest worker, painstaking and observant. He had made valuable use of his time, and had he been spared would have manifested what good sound medical training, backed by industry and careful observation in a large field of practice, can effect. He has died 'with all his music in him' at the early age of 26 years.

His death took place in California, whither he had gone in the hope of recovering his health. He succumbed to his malady, tubercular phthisis, on the 2nd of October.

In the but too few years allotted to him on earth he hath done his work faithfully and well; and the longest life is all too short if this be no achieved."

The Panama *Star* and *Herald* says:—

"The late Doctor Nelson came of a family of doctors, he being the ninth in direct descent. He was the second son of the late Dr. Horace Nelson, of Montreal. With his brothers, he was a student of the Medical Faculty of Bishop's College, Montreal, graduating in 1879, with honors in his primary and final years, taking the final prize. Still being a minor he had to wait nearly a year for his diploma, when he became a member of the College of Physicians and Surgeons of the Province of Quebec. While waiting for his degree he practiced as Assistant to Dr. H. Cotton, at Mount Forest, Ontario. Later, he established a successful practice at Marbleton, P.Q. The drudgery of the life told severely on his health, and the hereditary enemy of his family for many generations singled him out. In December, 1881, he passed through this city on his way to California, in search of health. He remained there a year, returning to this city in December, 1882. He practised with his brother, Dr. Wolfred Nelson, until March, 1883, when the Canal Company offered him an appointment. He filled the latter ably, and amassed a valuable collection of clinical notes, particularly on the fevers of the country. A series of meteorological observations conducted by him will throw some valuable light on the influence of atmospheric conditions on yellow fever. They will be published for the benefit of the profession that he loved so well. In April

last, in rapidly failing heath, he sailed for California, proceeding to Tucson, Arizona. He returned to Santa Barbara, accompanied by his brother, Dr. Francis J. Nelson, where his career closed at the early age of 26 years.

REVIEWS.

The Student's Manual of Chemistry. By R. A. WITTHAM, A.M., M.D., Professor of Chemistry in the University of Buffalo. New York, William Wood & Co.

This is just such a book as is needed by the class for which it is intended. General works on the subject of chemistry contain too much which is of little importance to medical students. In the work now before us special attention is paid to these portions of chemistry which are of direct interest to medical practitioners, while as far as possible those portions are excluded which are of purely technological interest. Descriptions of processes of manufacture are therefore very briefly dwelt upon, while chemical physiology and the chemistry of hygiene, therapeutics and toxicology, are fully explained. We strongly recommend this work to the attention of all teachers of chemistry in our medical school. No better text book can be selected.

The Physician's Visiting List. P. S. Blakiston, Publishers, Philadelphia.

This, the first visiting list in the field, maintains its reputation, in spite of many rivals. We cannot say more to recommend its use to our readers. It is prepared for 25, 50, 75 and 100 patients weekly.

AMERICAN JOURNAL OF OPHTHALMOLOGY.

This journal—the only one published on this continent in the interest of this specialty, is issued at St. Louis, Mo. It contains a large amount of interesting matter, and should receive the support of those for whose benefit it is published.

GLYCERINE AS A REMEDY IN INDIGESTION.

The editor of the *Medical Index* has found the exhibition of glycerine to be attended with satisfactory results in two forms of indigestion, particularly: 1st, in that form of irritative dyspepsia, which is the common result of rapid eating and imperfect mastication. The usual symptom in such cases is distress coming on half-an-hour or an hour after meals. There is also duodenal catarrh and dyspepsia, with perhaps, slight jaundice and other symptoms, referable to, and explained by, the irritated mucous membrane of the stomach and duodenum. The indications in such cases are well-defined. The food must be prevented from undergoing mischievous chemical changes before it can be acted upon by the enfeebled digestive organs, and a remedy must be given, which shall exert a local soothing effect upon the irritated mucous surface. Glycerine, theoretically, from its preserving and emollient properties, fulfils these indications, and in practice our contemporary has not been disappointed in its use. A somewhat similar condition to the above is met with among children shortly after birth, after a trial of feeding them solid food has been followed by colic and soothing syrup. In such cases the child is apt to have greenish discharges, occasionally specked with blood. Glycerine will be found an admirable remedy in these cases.

INTESTINAL OBSTRUCTION FROM CHARCOAL.

A patient who was lately under my care, suffering from chronic obstruction in the intestinal canal, probably in the descending colon, took, on his own account, freely of charcoal powder, often a drachm a day, to relieve flatulency. The result was an all but fatal obstruction. Fortunately, under the use of enemata, coupled with persistent but gentle abdominal friction, relief was obtained, although stercoraceous vomiting once occurred. The excretions causing the obstruction were coated with carbon, and portions of carbon also passed in the free state. This is the second case in my practice in which charcoal powder has caused intestinal obstruction.—*Asclepiad, October*, 1884.

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Original Communications.

NOTES OF SIX CASES OF REMOVAL OF THE OVARIES AND FALLOPIAN TUBES.

By E. H. TRENHOLME, M.A., M.D., B.C.L.

Professor of Gynecology, Medical Faculty, University of Bishosp' College.

The importance of the subject of removal of the uterine appendages leads me to briefly report six cases in which the operation was performed for the relief of pelvic disease and suffering, where no other form of treatment had been found satisfactory and where the condition of the patients was such that not one of them had any future for which to live.—I may say that while the symptoms varied with each case, yet the general features were of a common character, and all more or less directly referable to the monthly molimen. These six operations were made during the year ending first of April, 1884, so that 1½ year has elapsed since the first of this series occurred and half a year since the last. This delay has been caused by a desire to have the effects of the operation made known, so as to have some fair idea of what changes and benefits, or otherwise, had resulted. The mere report of such operations, even when recovery results, affords but little information for those who wish to study the subject; while it is manifestly unfair to return a case as cured simply because the patient did not die from the operation itself. I consider this operation as in some sense yet upon trial: the data for its performance and the exact class of cases where we can safely predict a successful issue are not sufficiently established. If this contribution helps toward this result my chief object will be gained. It is only by the report of such cases and unsparing critical discussion that the truth becomes apparent; and here, as well as in all cases, what we want is the truth, the whole truth, and nothing but the truth. As one of those who has devoted some attention to the treatment of diseases of women I fancy my own experience in dealing with some of these cases is similar to that of many others. The ordinary uterine displacements, the so-called ulcerations of the os uteri, with induration and enlargement, and even uterine myoma are varieties of disease easily recognized, and for the most part not difficult of cure. But all is different when disease of the appendages co-exist with that of the body of the organ itself. Here our caustics, alteratives, pessaries, and every form of medicinal treatment, fall short of effecting any special benefit to the poor sufferer, whose days are shortened by the misery of her life.

This desperate state of hopeless despair so pressed itself upon me that some ten years ago I ventured to tread in a new path, in the hope of affording relief to suffering and to the saving life. The fact that in this class of cases the activity of the sexual functions was the exciting cause of the intense suffering, whether accompanied by severe hemorrhages or interference with the organic functions of life, led me to resort to the removal of the uterine appendages for their relief and cure.

The sphere of this operation is being enlarged to embrace certain forms of mania. Some time ago Dr. Goodell reported several cases where it had been resorted to for mental derangement with marked benefit.

One of the following cases was of this character, and the result has been most gratifying—The

patient is remarkably improved, and is sensible of the great change that has resulted from the operation. I have had several letters from her, all of which manifest a good mental condition. There is still much to be done in this line, and I am anxious to see what may be achieved in the way of castration of insane male subjects. The well-known effect of the operation on animals leads me to hope that very many cases of mania might be so far relieved of their violent character, as to permit of their being retained at home, and thus lighten the dreary monotony of an asylum life. Such a case as I refer to, came under my observation a short time ago, but, unfortunately, too late to allow of the performance of the operation before the patient was removed to Longue Pointe Asylum. Without further remarks I now give a brief report of the case with the after-results of the operation, so far as known, up to the present time :

CASE 1.—Miss S., æt 34. Canadian, spare habit but well developed, and, except for disorders of menstruation, healthy. For many years patient has suffered during menstruation, but for the past year has been a confirmed invalid, seldom able to leave the house. I could not get any information from her former medical attendant, inasmuch as she had been under twelve doctors before she fell into my hands.

Upon examination I found the uterus low down in the pelvis and retroverted—the condition of the os was normal, the depth of cavity 5½ centimetres, and the organ freely moveable. On the right side found a small growth which was supposed to be either an ovarian or tubular cyst. As the uterine displacement with all its accompanying distress could only be treated palliatively, and as such treatment could not possibly offer any future to the patient worth living for, the removal of the uterine appendages was advised.

OPERATION.—On 31st of March, 1883, assisted by Drs. Ross, Armstrong, Gardner, Young and Shepherd, I removed the ovaries and fallopian tubes. The abdomen was opened in the median line, below the umbilicus, to the extent of about 9. c. m. On the right side there was a cyst about the size of a goose egg =1 lb. The left ovary was enlarged and cystic, both tubes much congested and apparently the seat of inflammatory action. The external wound was closed by three deep silver sutures and five superficial horse hair sutures.

The after-treatment does not require special note, as the convalescence was rapid and the temperature almost normal throughout, except on the second day when it rose up to 100.5 for a few hours. On the 12th day patient was able to be up in an easy chair. The only after-trouble encountered was small abscesses, due to the irritation of the silver sutures in the recti muscles, an occurrence which now, thanks to the suggestion of Dr. Goodell, need never occur.

This patient returned to her home in Ontario, and in less than three months after the operation was performing nearly all the work of a family of seven persons. Eighteen months have now passed, and though her general health was feeble for some months, and there was a good deal of pain and pelvic distress, on account of a too early resort to duties of life, yet on the first of this month (Nov.) she writes : "The great pain I suffered in the body is gone, am not troubled so much with my head and back, able to walk three or four miles a day, and gaining in flesh, and able to do *all* my own work, which has been very heavy for the last two months my mother was in Toronto for six weeks during the busy season and I did every thing myself. Were it not for the great pain of rheumatism I would be, comparatively speaking, *quite* well." This patient suffered a good deal, especially the first few months after the operation, from flashes of heat all over the surface of the body, followed by perspiration. This peculiarity has been noted in all the other cases now reported, but in some cases much less severe than in others.

CASE 2.—Miss——, æt 32. Born in Quebec. Well-developed, healthy girl in every respect, except as to the organs of generation. Her menses have always been painful, and though for a number of years she led an active life between the menstrual epochs, yet for the last four or five years has been unable to walk or sit for any length of time on account of severe and constant pains in the pelvis. In fact, most of her time was passed on her couch, with her feet elevated, in which position alone she obtained relief.

The patient had been a sufferer from the time menstruation began, but it was only after the menses had been arrested by the use of cold water baths that her disease assumed a serious character. Before, during, and after menstruation the pains are severe, while the interval between these epochs permit of limited out-door exercise. These periods of comparative relief have been gradually diminishing, in fact are almost absent at the present

time. Very serious menorragia has greatly reduced the patient.

The uterus was found retroflexed and retroverted and both ovaries enlarged.

As medical treatment had failed to afford any relief, and the state of her health rendered her not only a great sufferer, but quite precluded the possibility of any active useful life, the removal of the uterine appendages was proposed, and the operation for this purpose performed on 21st June, 1883 (now 17 months).

The operation was made in my usual way, except that I used silk ligatures in place of my favorite hemp.

The removal of the ovaries and tubes was not very difficult, but the low state of the patient was followed by a tedious and anxious recovery. The wound healed slowly and quite a quantity of pus escaped from the lower part of the incision, which healed up by granulation. The pelvic pains continued with much severity for months afterward, and does so still suffer, though to a much less severe degree. The chief advantage gained by the operation is the cessation of the menorrhagia, which has allowed the patient to gain in flesh and strength, and to walk about in a way not possible for several years past. The benefits hoped for have been interfered with by hernia of the bowels at the lower part of the wound, where lack of union permits of painful protrusion. This complication was not serious some six months ago, but I learn that it is now giving a great deal of trouble. The patient is now able to see to household duties, and leads a somewhat active life, while at the same time her restoration to health has not been as full and complete as I had anticipated.

CASE 3.—Miss ——, St. Catharines, Ont.

This patient was operated upon at the request of Dr. Goodman and the medical staff of the Hospital. She is a well-developed, healthy-looking girl of about 28 years of age. Has suffered for several years with menstrual disorders and pains in the pelvis. As she had received no benefit by treatment, and being a poor girl, who was obliged to work for her living, which she was unable to do, the ovaries and tubes were removed in the usual way on 2nd July, 1883. The recovery was rapid and perfect. She has returned to the duties of her station, and when last heard from was in the possession of very good health.

CASE 4.—Miss M., Toronto, æt 23. Pale, delicate, slight-built, nervous girl. Has been a sufferer since menstruation began, but of late is subject to extreme distress at each menstrual period. The pains are most severe in the region of the ovaries and down the legs. The uterus is indurated, tender and low down in the pelvis. Both ovaries enlarged and tender. On 28th August, the uterine appendages were removed in my usual way, and the patient made a complete and rapid recovery.

The subsequent history of this case is most satisfactory, so far as the results of the operation are concerned. All pelvic suffering disappeared, and within a few months she was able to walk several miles, and skate for hours without exhaustion. Being of a tubercular diathesis I have lately heard she is dying from pulmonary phthisis.

CASE 5.—Miss C., Vankleek Hill, Ont. Spare, tall, healthy-looking girl, æt 32. Has always suffered from her menses, but the flow was regular as to time and amount; the menstrual distress gradually increased till about six months ago, when the pains diminished in degree, but was accompanied by symptoms of mental derangement. Since this time she is despondent and melancholy, with a suicidal tendency. On one occasion she attempted to take her own life and from that time she was under constant supervision up to the date of her coming under my care. The ovaries were found to be enlarged and tender. The operation for the removal of the uterine appendages was made in my usual way on 22 nd March, 1884. The recovery and subsequent history of this patient has been most satisfactory, and her maniacal symptoms have not again manifested themselves. She has not needed any supervision, and enjoyes better health than for years past, and is now able to help in the house work of her home on the farm. I have had several letters which show a marked improvement in her mental condition, and she now seems to realize the mental disturbances she has passed through before the operation.

CASE 6.—Miss I., æt 21, Montreal. Patient is a medium-sized, well-developed girl. Has suffered since menstruation began, some seven years ago. Pain in the region of both ovaries constantly present, but at the time of the flow is most severe. On examination both ovaries are found to be enlarged and tender. Uterus also much congested and heavy. As the girl was in dependent circumstances and unable to earn her own

living, and as no local or general treatment availed to afford more than very temporary relief, the removal of the ovaries was performed 5th April, 1884. There was nothing special to note, so far as the state of the parts removed or the nature of the operation, but the patient proved a most troublesome one, and made the slowest and most unsatisfactory recovery of all the cases I ever had. The incision was hardly 5 c. in. long, but it took quite two months to secure union. The result of the operation, however, has been all that could be desired. The pelvic distress has entirely disappeared, the girl's strength and spirits have returned and she is now engaged in domestic service. I may say that upon two or three occasions, about the time of her menstrual periods, she has had slight hemorrhages lasting about a quarter of an hour, the total anount lost being about 3 i. upon each occasion. Montreal November, 1884.

GYNÆCOLOGICAL REPORT.

By E. H. TRENHOLME, M.D., Professor of Gynæcology, Bishop's College.

Sponge tents.—The need of safe and efficient means of dilating the cervical canal of the uterus is of such importance that practical hints as to the preparation and easy introduction of sponge tents are thankfully received. Some time ago Dr. Albert Smith, in a paper upon the subject, brought out the following points: 1st. That sponge tents made by pressing a flat piece of sponge saturated with wax between two marble slabs, expanded only one way and were of little service. 2nd. That the Sims' method of compressing a sponge saturated with a strong solution of gum arabic, impaled upon a wire compressed with cord, and then dried and smoothed, did not afford such a good tent as one made after his own method, which is as follows: 3rd. Wind a cylindrical piece of sponge *saturated with water only*, and without any stylet, with a piece of fishing line to which a six-pound weight is attached. This compresses it thoroughly, and its form is easily given by the fingers during the process of rolling—the surface can be smoothed by sandpaper. The tent should be of a uniform size from end to end, otherwise the cervical canal will not be equally dilated throughout. The tent should be made of fine strong sponge, and the use of medicating agents avoided, as they set the sponge and render their removal difficult. The tent should be straight and rapidly introduced into the canal of the neck and uterus. It should be coated with soap and fine salicylic powder rubbed in over the surface, so as to form a disinfecting paste, which allows of its being retained 48 hours without giving rise to any unpleasant odor. A strong compressing forceps of a proper shape is used to place it in situ, and the injection of a little warm water renders its retention secure in a couple of moments. If it should cause pain an opium suppository can be resorted to for its relief.

Time of removal.—This is a very important point, as, if it is removed at the end of 24 hours, it will cause hemorrhage, on account of the spongioles which have become imbedded in the mucous membrane dragging away the entangled tissue and thus leave a raw surface. The uterus also up to this time possesses its contractive power, while after 48 hours it loses it, all pain has ceased, and the removal of the tent is easily effected; and if a second tent is necessary it may be introduced immediately after washing out the cavity of the uterus.

Among the advantages claimed for the sponge tent are slowness of dilatation—not slowness of expansibility. It has, also, a disintegrating power over morbid tissue, causing them to slough off after dilatation has destroyed their vitality. Sponge tents will not slip out as do laminaria, and they also permit of the escape of fluids through their pores.

Thus the sponge tent is not only used as a means of exploration, but also as a valuable remedial agent, as before stated, and by its stimulating effect upon the tissues causes decrease of size in cases of chronic metritis and hyperplasia. They are often of great service in cases of uterine hemorrhage due to granulations of the mucous membrane—their action destroying the fungoid growths and thus curing the patient. In some case pediculated fibroids have been destroyed and removed by the finger without much trouble.

Society Proceedings.

MEDICO-CHIRURGICAL SOCIETY OF MONTREAL.

Stated Meeting, Sept. 26, 1884.

T. A. RODGER, M.D., PRESIDENT, IN THE CHAIR.

Enlargement of the Spleen.—Dr. ARMSTRONG exhibited a boy 11 years of age, whose spleen

extended a couple of inches below the umbilicus. Enlargement dated from an attack of typhoid fever three years ago. The lad's mother says that on three occasions he has had attacks of unconsciousness, followed by paralysis of one side, and lasting a few days. There is a diminution of red-blood corpuscles and an increase of white. Improvement in general health had followed the use of Liq. Arsenicalis, and for a time the spleen became smaller.

Dr. WILKINS said he had attended the boy off and on for years. He was not sure if what he took to be an attack of typhoid were that, as six or seven months after the boy had a feverish illness, when he became semi-comatose for several days. The spleen at times reached below the crista ilii. Had repeatedly examined the blood; usually there were but one-quarter the normal number of red-blood corpuscles. Found no absolute increase of white-blood corpuscles. For a time quinine caused the spleen to get smaller.

Traumatic Tetanus in a Woman aged 40.—Dr. WILKINS exhibited part of a foot, also a piece of sole leather, the size of half a pea, which had been driven up into the foot by standing on a nail. This occurred on Saturday. The following Wednesday she was seized with spasms, and removed to hospital on Thursday. It was thought that a piece of the nail might be in the soft tissues of the foot, but after careful examination by Dr. Roddick, nothing was found; but it was deemed wise to remove two toes and the parts for one inch back. On dissecting the piece removed, Dr. Wilkins found the bit of hard leather resting on a nerve filament. The symptoms were not much lessened by the operation, the patient dying thirty hours later, probably from asphyxia. Dr. Wilkins said if he had another similar case he would try excising the nerve higher up, say in the leg.

Dr. TRENHOLME said he had had a case very like this one, where a boy got a splinter of wood into his foot. The splinter was pulled out and the parts healed nicely, but in ten days tetanic spasms, followed, ending fatally. Dr. Trenholme found a very small bit of wood, surrounded by a drop of pus, in the foot. Dr. Fuller, who performed the *post-mortem*, traced the nerve from the wound to the base of the brain, and found it all inflamed. In the spine, the membranes, as well as the cord, were congested. Some of the fluid from the spinal canal was injected into a dog; paralysis followed, which lasted several days.

Dr. BELL said that he had seen several cases of traumatic tetanus in the hospital. A man was stabbed in the instep with a pitchfork, a bit of stocking was found at the end of the wound. Another case was that of a girl, who had run a nail into her heel. After death he dissected the parts, and found a sliver of iron resting against a nerve filament, which was swollen and œdematous. A third case was where a man was hurt from a fall on the buttocks; symptoms of a deep-seated suppuration ensued. The man died seven days after the injury. No *post-mortem* was allowed in this case. On theoretical grounds, Dr. Bell believed success might follow amputation and keeping the patient well under the influence of opium—in fact, pushing the opium as far as possible.

Dr. HENRY HOWARD hoped surgery would prove an aid in these cases, yet he doubted if it were possible. He related several cases which had been under his care—one being that of a son of the late Dr. Mount's, where tetanus followed a scratch on the buttock.

Uterine Myoma; Removal; Death from Exhaustion. Dr. WM. GARDNER exhibited the specimen, which was about the size of an orange. Patient, aged 52, had had severe hæmorrhages for four or five years. On examination, the above tumor was found, and. although very weak, it was deemed wise to remove it, which was done piecemeal. Patient did well for 36 hours, dying from exhaustion 56 hours after the operation. The discharges were never at any time fœtid. The womb was irrigated repeatedly, and at times continuously, by means of the double irrigation tubes. Dr. Browne assisted at the operation. Dr. Gardner said it was well known that uterine fibroids frequently kept up menstruation for long after the usual time, and were often the cause of the menorrhagias seen at the menopause. Profuse menstruation at the climacteric is not normal, and should be followed by a uterine examination in order to prevent operations being performed upon women already much weakened.

Dr. TRENHOLME thinks one is not warranted to explore the uterus by the occurrence at this period of menorrhagia alone. The question of operating for fibroids depends upon whether we

can control the hemorrhages till after the menopause or not.

Infant Feeding.—Dr. Blackader read a paper on this subject.

Dr. ALLOWAY said that infants objected to milk digested with Pancreatic Extract on account ofits bitterness. He also spoke of the benefits of using very fresh milk, and the means used to obtain a regular supply, as seen in some cities in the old country, where she asses and goats are brought from door to door and the quantity required there and then milked.

Dr. GURD asked if the observations made by other members agreed with his, viz., that artificially fed infants were, as a rule, larger than others.

Dr. CAMPBELL agreed with Dr. Blackader that only the minimum of food found necessary should be given. He condemned the more convenient long-tubed bottles as being not only injurious in themselves for many reasons, but also as tending to make the mother less careful altogether of their infants. It was so easy to put the baby down with the bottle beside it, and "let it go as you please." His experience coincided with Dr. Gurd's, that artificially fed infants were larger and heavier than others. He (Dr. Campbell) found that stall-fed cows gave a more acid milk, and as many of our city cows were stall-fed, this would account for the reason why milk foods so often disagree.

Dr. HENRY HOWARD said he had noticed that sometimes a mother's milk, whilst agreeing well with her own thriving child, when given another to nurse, the foster child would fail and pine away. When a student in Dublin, had often seen cows led from door to door to be milked for the customers.

Dr. CAMERON said if the milk were only partially digested, the bitter taste would not be present. He uses gum water as a diluent for milk in preference to any starchy preparation, believing it less apt to sour. He spoke strongly against the milk supplied to the city, which sometimes for hours was churned in the waggons on their way from the country. Some cows were kept in the city, but these were mostly badly housed and fed. A patient of his, an infant on milk diet, three months old, was suddenly taken with choleraic symptoms. The milk was stopped and it got well; again it was put on the cow's milk, and the diarrhœa, etc., returned. Dr. Cameron went to the milkman's to seek for the cause of this, and found that the day the baby was first taken ill the cows had been fed with old cabbage leaves and turnip tops. He thought the health Officer ought to look after dairy inspection.

Dr. WILKINS said he had had very satisfactory results with the use of pancreatised milk; has always used Bengar's preparation of Pancreatine. At times he has found it necessary to rest the stomach, and so has used it per rectum. Anæmic mothers don't give the quality of milk required, though the quantity may be plentiful. Here he orders barley water, and the child to be nursed less frequently. He said that a drop or two of sour milk left in the tubes of a bottle was enough to set up lactic acid fermentation in a whole bottleful of milk.

Dr. ARMSTRONG had found milk digested with Bengar's preparation very useful. On one occasion he fed a three months old infant for seven days entirely by the rectum, the child recovering from its illness.

Dr. BLACKADER said that the fresher the milk the better for infants. Boiled milk was much more difficult to digest than unboiled. He has noticed that bottle-fed infants were either very large and fat, or just the opposite.

Progress of Science.

COLDS.

We take the following from the *Lancet:*

Colds are chills, and chills are prolonged depressions of nerve-force, without the reaction which should occur immediately after the collapse. Nineteen persons out of twenty misuse this word "reaction," and the misuse involves more than an error, or confusion, of terms. There are *three* stages of every strong impression made on a living organism. First, the attack—in this case the chill; second, the pause, like a dead-point, during which the organism is depressed—that is, lying under the stunning effect of the attack; and third, the reaction. "reaction" cannot occur until after the dead-point, and the mistake commonly made is to speak of the stage of exhaustion or depression which follows any severe impression as the reaction, whereas it is precisely because no reaction occurs and the dead-point is prolonged that matters go amiss. The physiological, or perhaps we ought to say the pathological, process of a cold has been thus described: When the surface of the body or the air-passages are chilled by a draught, or by being drenched with rain and sitting in cold damp clothes, lying in damp sheets, and the like,

the mischievous impression is made, not on the skin itself or on the lining membrane of the air-passages, but upon the vast network of minute nerve-filaments which lies beneath these membranes, and connects the surfaces of the body—both external and internal—with the nerve-centres, which are the sources and foci of energy and power. These nerve-centres receive, through the multitudinous branches of telegraph-like afferent nerves converging to them, a shock or staggering impression which for the moment paralyzes them; and during this paralysis or stupefaction the vaso-motor, or vessel-contracting centre, whose peculiar function it is to regulate the calibre of the blood-vessels, gets the upper hand, and these blood-vessels are contracted so that they carry less blood than usual. The smaller branches of the arterial system, which form a net-work immediately underneath the skin and give it its bright pink color, are so reduced in "bore" or calibre—as any elastic or compressible tube may be reduced—that the red blood does not flow through them, and the surface looks pallid. This is the first effect of "chill." Presently comes the recovery from this state, or the "reaction" as it is called, when the first effects of the shock have passed away and the centres begin to revive. Now occurs the critical moment. If the shock has been great, and the recovery is slow or imperfect, as often happens in a depressed or what is called a "delicate" state of the organism, the vaso-motor centre, which of course shares the general depression, though it is not the first to feel it and show it, will give way before the reaction is established; and then the heart, bounding in its recovery, pumps its blood into unduly yielding and unstrung vessels, and dilates them and local congestions or accumulations of blood may take place, while the absence of proper resistance excites the heart to tumultuous action, and the disturbances of fever and inflammation occur. It is a question of the balance in power between two parts of the nervous system, the general and the particular—the latter being the centre that regulates the calibre of the blood-vessels—and this practically resolves itself into a question of time. If the reaction of the general nervous system be quick, there is a rush of blood to the surface vessels, and due resistance being found, the heart quickens its pump-like action, and the sweat-glands are thrown into activity, so that perspiration ensues. If, on the other hand, the vaso-motor centre has participated seriously in the shock of the chill, the muscular coats of the vessels are not properly contracted; they have lost their tone. Then the blood propelled to the surface simply dilates the vessels, so that there are the redness and heat of "fever" or pyrexia, and the skin remains dry; there is rapid action of the heart, partly because there is less than the normal resistance to overcome, and partly because the vagus fails to exert its inhibitory action, and both the muscular structure of the heart and the respiratory centre are left uncontrolled, but the current of the blood moves slowly through the vessels, and the heart-wave is perceptible in the arterioles, and is present in the capillary area.

Coincident with these mechanial actions and reactions, involving departure from the healthy condition of the circulation, occur disturbances of the chemical processes of health, and consequently alterations in the nutritive relation of the various tissues of the organism and the blood. What then is a cold? Clearly it is a disturbance of the balance between the several parts of the nervous system, brought about by the shock of a sudden or prolonged exposure to the depressing effect of "chill"; although the same physiological results may be produced in the organism by the operation of any agent which is capable of giving the nervous system a similar shock, and thus creating the same kind of disturbance. Nature's provisions against the consequence of a "chill" and for the prevention of a "cold" are *sneezing* and *shivering*. A violent fit of sneezing often saves a chilled body the consequences of the nerve depression, or "shock," to which it had been subjected; and this shock may in its first impression be very limited in its area; for example, the small extent covered by a draught of cold air rushing through the crevice of a door or window. The nerve centres are aroused from their "collapse" by the commotion or explosive influence of the sneeze. If sneezing fails, nature will try a shiver, which acts mechanically in the same way. If this fails, the effects are likely to be very serious, and bad consequences may ensue. The popular notion reverses the order of events, and hence the saying, "If there is sneezing the cold will be slight, if there is shivering it will be grave;" whereas it is slight when sneezing suffices to recover the nervous system quickly from its depression, and grave when even strong shivering fails to do so. In case of chill, with threatened cold, sneezing may be produced by a pinch of snuff of any kind. This is how some of the vaunted "cures" of cold by snuff are brought about. Or brisk exercise may ward of the attack. The popular idea is that the circulation is restored by these remedies, but the true explanation is that the nervous system and centres are aroused. The first step towards an intelligent treatment of chill and cold is a scientific recognition of their nature.

PHARYNGITIS.

Two grains of the chloride of ammonium, combined with ten or fifteen minims of the tincture of cubebs, given every half hour, oftentimes controls acute pharyngitis and superficial inflammations of the other tissues about the throat. For inflammation of the throat dependent upon a gouty diathesis, add to this mixture ten minims of ammoniated tincture of guaiac, and administer every hour. (Dr. A. A. Smith.)—*Med. Record.*

FREQUENT AND PAINFUL URINATION.

A Clinical Lecture, delivered at the Long Island College Hospital.

By Alexander J. C. Skene, M.D.,
Professor of Gynecology in the Long Island Medical College; Surgeon to the Hospital.
(Reported by Edward Develin, M.D.)

Gentlemen: To-day I desire to call your attention to that condition of frequent and painful urination arising from certain disturbances and anatomical lesions of the sexual organs.

Case I.—Our first patient is thirty years of age, and has now been married eight months. Her health has always been fairly good until two months ago, when she began to suffer from frequent and painful urination. These annoying symptoms have continued ever since, and have also increased in severity. She states that in the morning and during the forenoon she is comparatively comfortable, and can retain her urine a reasonable length of time; but towards the afternoon the desire to urinate is frequent and urgent, and she has much pain in evacuating the bladder. These symptoms continue until night, and during the early part of the night she is compelled to rise several times and relieve her bladder; but after she has once fallen asleep she remains quiet until awaking in the morning at her usual time for rising.

Now the fact that she is able, while asleep, to retain her urine until the bladder is distended to an average capacity, is an indication that the trouble does not involve the entire bladder, but that it is limited to the urethra, and, perhaps, the neck of the bladder. If she had a general cystitis, the probabilities are that she would not be able to hold even an average quantity of water in the bladder at any time. We cannot, however, be sure as to the extent to which the bladder is involved without an examination of the urine, but it is fair to suppose, judging from her symptoms, that the trouble is limited to the urethra, and probably the neck of the bladder to a slight extent. It is a curious fact in her history that during the latter part of the night and during the forenoon she is comparatively comfortable, but that her symptoms become aggravated in the afternoon and continue during the early part of the night. This may be due to one of two causes.

First: It may be due to the fact that the irritation subsides after lying in bed for a time, and does not return until she has been about for several hours during the early part of the day. The fact of her being upon her feet and maintaining the erect position, naturally brings more pressure to bear upon the neck of the bladder, and would thus aggravate an already existing irritation, and give rise to frequent urination, which continues until she again seeks relief by assuming the recumbent position in bed for a time. This certainly is one of the causes for this frequent urination in the later part of the day.

Secondly: There is a cause which gives rise to the same peculiarity of clinical history, and that is *malarial poisoning*. A patient suffering from malaria quite frequently has irritability of the bladder, indicated by frequent and painful urination, these symptoms being always most marked in the afternoon and evening. In this case, however, there is no indication of malarial trouble; so that the peculiarity of her history is no doubt due to the erect position maintained during the early part of the day.

Regarding the primary cause of her trouble, that is not quite so clear; there is no history of any gonorrheal inflammation which could have affected the urethra or bladder, as it sometimes does; neither has she any uterine or pelvic disease which would directly or indirectly affect her bladder. It is barely possible that it arises from the change in her social relations: having married late in life—some eight months ago—it is just possible that her familly relations may have produced an irritation of the urethra and base of the bladder, which, when once established, is very liable to persist, if not relieved by treatment. Having an opportunity of examining this patient's urethra and the neck of the bladder, the probability is that we shall find a hyperæmic condition, and perhaps some tendency to ulceration of these parts, but of that we cannot speak positively; as the examination has not yet been made, nor shall we trouble her with such examination, until we see if we can relieve her by treatment.

In the treatment of this case we will render the urine as bland and non-irritating as possible, by permitting her to drink freely of the alkaline mineral waters—Vichy for instance—and, in case she cannot procure that, we will order the acetate of potash. At the same time I will give here a favorite prescription in these cases:

℞.—Fl. Ex. Buchu, ... ℥ij.
Tinct. Conium, ... ℥j.
Sig. ʒ j half an hour before meals.

If this fail to give her relief we will then employ injections of sulphate of zinc, half a grain to the ounce of water, with the addition of a drachm of the fluid extract of hydrastis canadensis. In using this local application we will employ a syringe with rather a large nozzle, which is to be introduced just within the meatus, then slowly and carefully inject the mixture, so as to force it along the urethra into the bladder; being careful to have the bladder emptied previously. By adopting this plan we are sure of bringing the remedy in contact with the entire mucous membrane of the urethra. We will also request her to abstain from coition, as that may be the cause of her trouble.

Case II.—I have here a very interesting case, brought to me by Dr. Stewart. This lady is forty-five years of age, unmarried. She gives us the following history: Up to six weeks ago she menstruated regularly every four weeks; since four weeks ago she has menstruated three times, she is therefore suffering from menorrhagia. She has great pain in the back and supra-pubic region,

with frequent and painful urination; altogether, suffering extremely, she says. I am now making but very little pressure upon the abdomen, and yet she complains very much. Upon examination I find an extremely interesting pathological condition here. Now bear in mind the prominent symptoms: there are intense backache and pain in the supra-pubic region, with an abnormal condition of the menstruation, and a frequent desire to urinate. Dr. Stewart, in carefully examining the condition of the sexual organs discovered conditions which did not altogether coincide with her history as given by herself. He found the uterus large and well developed, with an os externum which looked as if it had seen service; the same also with the perineum. Upon being questioned very closely, or, as they say in law practice, "cross-examined," she admitted that she had had a child five years ago, and had been also operated on for amenorrhœa.

This gives us a clue as to the cause of the present condition of things which we have here. We find the uterus is large and the fundus is pointing towards the upper part of the symphysis pubis, the os looking towards the hollow of the sacrum; the body of the uterus is therefore pressing upon the bladder and crowding it downward—a condition which is sufficient to account for this frequent urination. The uterus is anteverted, and the prominent symptom is the functional disturbance of the bladder, due, no doubt, to the displacement. I here show you a specimen of her urine. We often have symptoms of cystitis without cystitis being established. In this case we have vesical tenesmus because of the pressure of the fundus uteri. A normal bladder will tolerate pressure for a time, but after a while it will incite this frequent urination; it is therefore a question whether or not we have cystitis here. You will observe in this urine that there is an abundant deposit of the phosphates; if this clear up upon the application of heat, and we find no products of inflammation under the microscope, we will simply say that this is a mechanical derangement of function.

There is, however, another unfortunate condition here, and that is, that while the uterus is anteverted it remains there in spite of all our efforts to restore it. It is anteverted and fixed in this position because of a former peritonitis. If she has been subjected to an operation for the relief of amenorrhœa, she has been in the way of having pelvic cellulitis or peritonitis, or both, and the evidence is that she has had one or both.

We have here, then, an incurable anteversion; all that we can do is to relieve the symptoms; we cannot remove the cause of her pain, backache, and vesical tenesmus; we can only modify these, while hoping that she will live long enough to pass the menopause, and be relieved by the final involution of the uterus. The plan of treatment will be to try and relieve her general condition. This urine shows her nervous system to be below par; when we have this brick-dust deposit, it is said to be a symptom that the waste of the tissues is in excess of the assimilation for their support. It is said of clergymen that the deposit of phosphates in the urine is greater upon Monday than any other day in the week, by reason of the using up of the nerve force on the preceding Sunday. It is possible that we may improve this woman's general health so that her system will be able to tolerate her local difficulty, and thus bear her suffering much better.

It is impossible to use a pessary in this case, as the uterus is fixed; part of her vesical irritation may be due to the fact that her old peritonitis involved the peritoneum covering the bladder, so that now it is impossible for that organ fully to distend. This peritonitis has probably extended in front of the broad ligaments, forming adhesions, and thus holds the bladder in a splint, so that it cannot extend; this may be another cause of her frequent urination. So that we have here two factors: the displaced uterus, and the thickening of the peritoneum upon the walls of the bladder, which prevent its distention. We can do little but apply the douche and paint the vaginal roof with iodine; we can also introduce a belladonna suppository if advisable. This, however, as I have told you, can only be palliative.

This case is an exceedingly important one, as those who are most prone to this condition are those who abuse the generative functions.

There is one thing more here, which however hardly comes under my Chair. We find above the umbilicus a marked pulsation, which may be an aneurism of the aorta, and which might possibly account for some of the abdominal pains.

CASE III.—This patient is twenty-six years of age, and she informs me that she first commenced to menstruate when she was eleven years of age. She has now been married seven months; her menstrual flow previous to marriage appeared every two weeks, but since that time she has menstruated once a month until within the last three months, when she has menstruated once in two weeks, as previous to her marriage. She now states that she has a frequent desire to urinate, and she is not relieved when she has passed water. She has vesical tenesmus, this is accompanied with some pain; her bowels are also constipated.

Now this is a very interesting history. First, abnormal menstruation, becoming normal after the change in her social relations, and then after a time again becoming abnormal. This is a marked violation of an essential law relating to menstruation, and the one which I dwell most upon in my didactic lectures, viz., that each individual should abide by the rule which she takes upon herself. If she start out in life to menstruate once in three weeks, that is normal for her, and she should continue to do so.

Now on examining this patient, I found the os pointing directly towards the introitus, and the fundus towards the pubes, the uterus being doubled up, both body and cervix being flexed forward. so that the two parts together make pressure upon the bladder, which is in all probability the expla-

nation of her desire to urinate constantly; she informs me that she has to get out of bed several times during the night to urinate. The mechanical pressure in this case is disturbing the functions of the organ.

In this case, if we remove the cause we will in all probability remove the cystic irritation, and possibly correct the menstrual derangement. Sufficient to say just now that we will employ the usual treatment for anteflexion of the uterus, and, if we can overcome that, all the symptoms will subside.

CASE IV.—This patient, a married lady, menstruated regularly until four years ago. She comes to us to-day complaining of some disturbance of the bladder. I think I shall be able to illustrate to you a prolapsus of the bladder, which gives rises to much annoyance in this case. Now, here, as you observe, we have both walls of the vagina coming down; here, also, we find from one-half to three-quarters of an inch of laceration of the perineum. The posterior vaginal wall, as you will observe, is not prolapsed as much as the anterior wall and the bladder.

Now, as I introduce the sound into the urethra, it should, of course, pass in an upward direction, but, as you can see by the arc the handle of the instrument describes, it passes backward, giving us the diagnostic sign of prolapsus of the bladder and upper portion of the urethra. These parts have been torn away from their original support and carried downward; the bladder and the urethra have parted company with the structures of the pelvis which support them; this, therefore, would result in partial incontinence of urine, owing to the undue pressure brought to bear upon the sphincter of the bladder.

Incontinence, however, is most marked when the prolapsus of the bladder is in the first degree; in complete prolapsus incontinence disappears, and gives place to difficulty in urinating. I have seen some cases where the bladder had to be restored to its position before it could be emptied; in such cases I have instructed the patient to urinate while lying down upon the face. I remember being called in a case of this kind, in which the uterus was atrophied and the bladder rested upon the floor of the pelvis. She was unable to empty the bladder while in the erect position, but the moment the patient turned upon her face in the reclining position she could urinate with great comfort, and for the rest of her life I believe this patient will have to urinate in the knee-chest position. It is well to bear this point in mind.

In the case before us we must endeavor to do something to relieve her, as during the ensuing warm weather this prolapsus and partial incontinence of urine will be a source of great irritation and annoyance. I would, therefore, advise that she have perfect rest; tampon the vagina until this organ regains some tonicity, restore the perineum, and then introduce an anteversion pessary. Sometimes the restoration of the perineum and rest will suffice, but in other cases we fail with all the means which we have named, because the pessary does not come down far enough to keep the bladder in place. There is, however, a little instrument recently invented by Dr. Malcolm MacLane, of Harlem, which answers when the anteversion pessary fails. This consists of a little grooved instrument, which is passed under the arch of the pubes lying up against it, which is secured by a cord attached to it and passed around the abdomen, the only difficulty being that the two bars running up on each side of the meatus cause some irritation, but it really answers the best purpose in these cases when rest, restoration of the perineum, and all other pessaries fail.

A question here arises, viz.: If you support the bladder and urethra, and retain them in position, will the attachments ever become restored? To this I must answer that I do not know. I have seen a large number of these cases, and watched them with great interest, but I have not yet seen any case in which such an event took place. My experience would lead me to say that they are never entirely cured, although made quite comfortable by proper treatment.

CASE V.—This patient now before you is fifty-three years of age, has been married twenty-six years, and has three children. She is now suffering from prolapsus uteri, and also prolapsus of the bladder, as you all observe. This tumor projecting from the vulva is the uterus, bladder and vaginal walls. When I pass a sound up to the fundus, I find that the uterus is four and a quarter inches in length, showing it to be very much larger than it ought to be in a patient of this age. This which I now hold between my thumb and finger is a portion of the bladder. I need hardly add that we have here a well-defined prolapsus uteri in the third degree. We are sometimes in doubt as to the degree of prolapsus in some cases, but here we are fortunate enough in having it so clearly defined as to be unmistakable. Now, to prove to you that this is the bladder which I hold in my hand, I pass the sound into it, and in place of the instrument taking an upward direction it curves downwards, and those who are near by can see that I can put my finger upon the point of the sound within this sac in my hand, you can see it move my fingers. We have then complete prolapsus of the bladder as well as of the uterus. I will now carry the uterus up to its place in the pelvis, and in doing so you see that I press the cervix backward. If I did not do that, I should transform the prolapsus into a retroversion of the third degree. On making pressure I am very careful to carry the fundus upward. Sometimes it is impossible, as the uterus will double upon itself, the fundus falling backward; we then transform it into a retroflexion. In such cases it is then necessary to pass the sound into the uterus and guide it into position by this means.

In this case we have also an anatomical lesion of the perineum, and in addition to this we have also a functional lesion, a relaxation of the muscles,

When I make pressure backwards there is not much muscular resistance.

Now the point which I wish you to carry in your mind is the changes which occur in the other organs of the pelvis, owing to this uterine displacement. In addition to the uterus becoming displaced, the bladder also comes down with the uterus; and in all these cases of displacement, if they have existed for any length of time, the vaginal walls become relaxed, which leads to or follows the abnormal position of the uterus.

Sometimes we have only one vaginal wall rpolapsed; usually, however, both. In this case both of these are entirely out of the pelvis, as you see, but the posterior vaginal wall does not come down so far as the anterior. In managing a case of this kind, just do as you see me now, push the uterus up in position, keep the patient in the recumbent position, and use the vaginal tampon to retain it there. I have just such a case at the present time in my private practice. Before the uterus was restored to place, she spent most of her time in urinating. Now I have her lying in bed under the treatment I have just described, and she can retain her urine as long as anyone. When the relaxation has been overcome to some extent, and the parts have regained their tonicity, we will restore the perineum in this case so as to get as much normal support as possible making a restoration of which at first appears to be more than is necessary to compensate for the tendency to prolapsus.

So we bring the vivifying process a little higher up into the vagina and bring together as much tissue as possible, making the perineal body run up into the vagina, so as to make a support for the bladder. But even then, in some cases, you will find that in time the bladder will gradually slip down, so that, perhaps, this lady will come back at the end of a year and say that our operation did not do her any good. We will have, however, gained much, having secured a good perineum upon which to rest a globe pessary. We will follow out precisely this treatment here, keeping the parts in position for a time, then by and by restore the perineum, and afterwards introduce the globe pessary, if need be.

Case VI.—Our next case is also one of incontinence of urine; the cause, however, of this condition in this patient is entirely different from that of the preceding ones, and therefore must not be arranged under the same head. The patient, however, comes to us suffering from this incontinence, and I now present her to you as illustrating another cause of this difficulty. This little girl is twelve years of age. When she was three years old she had an attack of scarlet fever, and has never been well since; she has not accomplished much in the way of growth or development; she looks somewhat anæmic. During the night she has to get up six or seven times to pass her water; and, unless exceedingly tired, the desire always awakens her. During the day the passing of water is equally, or more, frequent; for the reason she has been unable to attend school. This is very interesting, as it illustrates a class of cases which you will meet quite frequently. When urinating there is always pain, and she informs me that, if she attempts to restrain herself, it increases the pain; but immediately upon evacuating the bladder there is complete relief for a time. For the last nine years this has been going on. It is, however, a rare thing as a rule in this difficulty for the patient to awaken at night, the urine being generally passed in bed. This is a most miserable condition for a child to be in, being obliged to get up to urinate many times every night, or else to sleep in a bed saturated with urine.

Acute cystitis often follows the eruptive fevers, and sometimes in these cases it becomes chronic, as in this case, so that we should always be on our guard in the eruptive fevers and see to it if there is any cystitis following, otherwise the result will be the same as in this case. Now, whether the child has general cystitis or an inflammation of the neck of the bladder with urethritis remains to be seen. The way to make the diagnosis is repeatedly to examine the urine, selecting the last drachm or two which is passed, and if it contains pus and epithelium we may be tolerably sure that there is general cystitis. The order of the development of the pathological conditions in this case is as follows: first, scarlet fever, which gave rise to acute cystitis, or urethritis, which, in place of ending in recovery, ran into the chronic or continuing variety.—*Philadelphia Medical News.*

GOITRE.

BY J. SOLIS COHEN, M.D.,

Professor in the Department for Diseases of the Throat and Chest, Philadelphia Polyclinic and College for Graduates in Medicine.

Treatment is both constitutional and local. Recent cases only, and those of a comparatively moderate bulk, offer a fair prospect of success to purely medicinal treatment. Simple hyperplasia, especially when recent, often subsides spontaneously without special therapeutic intervention. This may be followed by renewed hyperplasia, again amenable to spontaneous subsidence. Repeated recurrence, however, will culminate in permanent hypertrophy. The largest goitres are not amenable to any treatment, surgical or medicinal. Between these extremes the therapeutic indications vary greatly with the nature of the tumor and the individuality of the case. Goitre apparently due to causes associated with locality of residence, is best treated by change of residence. Co-existent catarrhal inflammations of the larynx and trachea usually require appropriate treatment, prior to the institution of any measures specifically addressed to the hypertrophied gland itself, inasmuch as the frequent succession of the tumor during paroxysms of cough is unfavorable to retrogression of the hyperplasia. The internal remedies employed in goitre are chiefly those classed as

alterants. Of these, chloride of ammonium and iodide of potassium are the most reliable. Hydrofluoric acid has recently been strongly urged. I have not used it. Chloride of ammonium is especially indicated, both for its favorable influence upon the inflamed air-passages, and for its value in promoting the absorption of hypertrophied tissue. The liberal administration of iodide of potassium is often effective in uncomplicated hypertrophic goitres of soft consistence, even when of considerable bulk. Temporary suspension of the remedy may become necessary during the treatment, should the general health suffer impairment. Constitutional disturbance, often wholly attributed to the remedy, is, in reality, due in great measure to the rapid absorption of the constituents of the diminishing tumor, and may be largely controlled by the institution of measures promotive of the emunctorial functions. Iodide of ammonium, alone or in combination with the chloride of ammonium, may sometimes be equally efficacious with the potassium salt, and less depressing. Iodine and iodoform are successfully employed, as well as the salts of iodine. In addition to the internal administration of the drug, iodine in tincture or compound tincture of officinal strength or diluted with ether, collodion, glycerine or alcohol, may be painted over the tumor once or twice a day, with advantageous results. Iodoform dissolved in ether, chloroform or collodion, is sometimes more efficacious. Collodion is often the preferable menstruum, by reason of the salutary compression which it exerts upon the mass. Inunctions with ointments of iodine, iodide of potassium, or iodide of mercury, variously diluted, are sometimes preferable to the application of paints or solutions. The biniodide of mercury, rubbed in under exposure to direct sunlight, is strongly urged by the British physicians in India. Any other method of securing the necessary heat should be equally efficacious. Vascular goitre is sometimes peculiarly susceptible to the favorable influence of the iodides. Excessive vascularity, however, is a great obstacle to the success of that influence. These methods are often efficient in diminishing the deformity to a great extent, sometimes rendering it imperceptible to casual inspection; but it is very rarely that entire absorption is secured.

Medicinal treatment failing to reduce a goitre, electric and electrolytic procedures may be instituted with some expectation of success. Percutaneous applications, both of the current from the battery and the current of induction, have been followed by absorption of the contents of the goitre; but the battery current is preferred, on theoretical grounds. Percutaneous applications being inefficient, electrolysis may be attempted by the insertion of needle-electrodes into the mass, and the passage of the battery current for a few (5-10) minutes, the process being repeated once or twice weekly. Both poles may be inserted into the tumor, or one only. In the latter instance, the needle is connected with the negative conductor, and the circuit is completed by placing a moistened sponge-electrode on the exterior. Some operators prefer to attach several needles to the conducting wire, for the purpose of establishing multiple centres of decomposition; but the quantity of electricity which can be utilized being limited it seems more logical to concentrate the action by the employment of a single needle. Extrication of hydrogen at the negative pole will cause the tissues around the needle to become swollen or puffed out. They will be first red, and later, black and blue, from effusion. A small eschar of cauterization will form at the point of puncture.

In cystic tumors, the choice of the pole for insertion into the mass will depend upon the intention of the operator to bring about disintegration of the contents of the cyst, on the one hand, or to promote coagulation on the other. In the latter case the positive is chosen. In goitres containing cysts and permeated by large veins, electrolysis for closure of the veins has been practiced simultaneously with evacuation of the contents of the cysts; the capillary trocar for the latter purpose being employed as the electrolytic needle (Henrot).

The following procedures, all of which are often successful, may be cited for reference :—

First as to simple hypertrophic goitre. Blisters over the goitre and inoculations with irritant substances, to excite cutaneous inflammation, and thus imitate nature in some of her demonstrations of spontaneous cure. Leeches externally, to reduce vascular congestion and promote circulation. Hypodermatic injections of ergotin over the goitre, for constitutional as well as for local effect. Interstitial injections of arsenic, ergotin, carbolic acid, tincture of iodine, tincture of the chloride of iron to provoke suppurative inflammation and the production of abscess. These injections are by no means innocuous, and are occasionally the direct cause of death. In favorable cases, however, local reaction is rarely severe, and, if so, may be moderated by the application of cold. The introduction of a seton is sometimes employed to excite suppuration. It may be passed either directly through tumor and skin, or through tumor only, after its exposure by cutaneous incision. When thrust through the skin, it is best to pass a silken thread, by means of a large needle, and to introduce additional threads as the cure progresses. The thrust of a seton lancet may cause hemorrhage The seton is best introduced quite far back, if readily practicable. The irritation produced by this treatment excites decomposition of the hypertrophied gland, with subsequent suppuration. Discharge usually takes place by the side of the seton. Should the size of the clumps of detritus impede discharge in this way, incision should be made at the chief opening, and the broken-down contents be withdrawn by grooved-director, spoon or finger. Their retention may provoke septicæmia, or even pyæmia.

The free movement of a trocar in the mass, to excite suppuration and convert the firm tumor into a cyst with fluid contents, for subsequent treatment, has been practiced (Billroth).

This procedure is attended with risk of wounding vessels and exciting serious hemorrhage, which, if profuse, may threaten suffocation by pressure. and thus demand prompt incision of the mass under very unfavorable conditions.

Whenever the attempt is made to transform an hypertrophic goitre into a suppurative cyst, the accomplishment of the purpose is announced by pyrexia. As soon as decided fluctuation becomes evident, it is necessary to make a long incision, to evacuate the pus and detritus. A counter-opening should then be made at a suitable point, and a seton or a drainage tube inserted: or the gum-elastic drainage threads of Prof. Levis may be employed. Disinfectant solutions are injected twice daily, or oftener, to keep the cavity free from pus and other products.

In *Cystic Goitre*, mere puncture with the trocar, for palliative purposes, is generally useless as a therapeutic measure, for the cyst rapidly refills. Its liability to be followed by hemorrhage within the cyst, from puncture of a vein, may involve a risk of compression of the air-passage, or of infiltration into the cervical connective tissue. Evacuation by trocar, followed by injection of alcohol, carbolic acid, compound solution of iodine, tincture of iodine, tincture of chloride of iron, or other irritants, to provoke obliterative inflammation is sometimes practiced, the solution being retained for minutes or hours, by plugging the canula. Evacuation by slow drainage is also practiced. These procedures have occasionally been fatal, by pyæmia. If the operation is successful, the cyst usually refills gradually, and the new products undergo gradual absorption in from three to six weeks, or longer.

Fibrous Goitres are sometimes treated by interstitial injections of arsenic, ergot, carbolic acid, tincture of iron and tincture of iodine. Fatal results have sometimes followed these measures, especially the injection of iron, so closely as to have been the direct consequence of the procedure. Usually from fifteen minims to a drachm of the solution is employed, and the injection is repeated at intervals of a week or two. Successive injections with impunity do not always guarantee survivals after subsequent ones. Injection into veins is usually the immediate cause of death. As urged by Lücke, iodine is the preferable substance for injections into goitres, on account of its decided absorbent influence on glandular tissue, a valuable addition to the condensatory, cicatricial process set up by the wound of the instrument, the repetition of which is thought to have, likewise, some favorable effect. The syringe being loaded, and the air expelled from its well-sharpened nozzle, the tumor is grasped in the left hand, in such a manner as to bring it firmly beneath the skin, at the point selected for puncture. This point should be at some distance from any cutaneous vein. The needle is then thrust sharply into the tumor, and the piston driven down until the desired quantity of fluid has been discharged. The syringe should be held by its barrel, during both insertion and withdrawal, so as to avoid escape of the solution into any vein which may have been pierced. As the needle leaves the skin the orifice should be covered by the finger, until protected by adhesive plaster, to prevent oozing, whether of blood or of solution. Hemorrhage from the vessels which course along the capsule of the gland is rarely serious, and usually controllable by digital compression. Pains in the jaws sometimes occur a few minutes or a few hours after the injection. To inject a *retrosternal goitre* the tumor must be held up during its ascent in respiration. Should it slip back before being penetrated, the needle can be left in the skin until a favorable moment affords the opportunity to complete the puncture.

Radical surgical operations for goitre are adapted rather to cystic than to other forms, and are to be instituted for relief from dangerous symptoms, and not for relief from deformity merely. The best prospects of success, however, occur in cases in which there is no immediate danger to life. Hence the majority of surgeons prefer to decline the performance of the radical operations, or at least to defer them to the latest moment. All extensive operations upon goitres are liable, first, to nerve-shock, from irritation of the deep-seated nerve trunks, and this, as I have seen, may terminate fatally. Secondly, in common with all serious operations about the neck, they are liable to be followed by pneumonia. Thirdly, they are liable to be followed by septic inflammation of the cervical connective tissue. All of these accidents are grave, sometimes inevitable, often fatal.

Ligation of the thyroid arteries, which sometimes acquire a bulk equal to that of the carotids, has been practiced, to deprive the gland of excessive nutriment, and thus induce absorption. Though occasionally successful, establishment of the collateral circulation occurs so promptly as a rule, as to thwart the object. The anatomical relations of these arteries to the recurrent laryngeal nerve are sometimes such that injury to the nerve cannot be avoided in their ligation; and thus aphonia may result as the only outcome of the procedure.

Ligation of the base of the gland is sometimes performed; usually after due exposure of the tumor by integumentary incision and careful dissection. Occasionally it is practiced subcutaneously. The ligature is tightened from day to day, until there is evidence of the death of the tumor; and the mass is then cut through by further tightening, or removed by the knife carried in front of the ligature. I have never seen this procedure.

Incision, quite a frequent operation, and particularly suited for multilocular and thick-walled unilocular cysts, is practiced by incising two or more inches of the skin at the most accessible point,

living, and as no local or general treatment availed to afford more than very temporary relief, the removal of the ovaries was performed 5th April, 1884. There was nothing special to note, so far as the state of the parts removed or the nature of the operation, but the patient proved a most troublesome one, and made the slowest and most unsatisfactory recovery of all the cases I ever had. The incision was hardly 5 c. in. long, but it took quite two months to secure union. The result of the operation, however, has been all that could be desired. The pelvic distress has entirely disappeared, the girl's strength and spirits have returned and she is now engaged in domestic service. I may say that upon two or three occasions, about the time of her menstrual periods, she has had slight hemorrhages lasting about a quarter of an hour, the total anount lost being about 3 i. upon each occasion. Montreal November, 1884.

GYNÆCOLOGICAL REPORT.

By E. H. TRENHOLME, M.D., Professor of Gynæcology, Bishop's College.

Sponge tents.—The need of safe and efficient means of dilating the cervical canal of the uterus is of such importance that practical hints as to the preparation and easy introduction of sponge tents are thankfully received. Some time ago Dr. Albert Smith, in a paper upon the subject, brought out the following points: 1st. That sponge tents made by pressing a flat piece of sponge saturated with wax between two marble slabs, expanded only one way and were of little service. 2nd. That the Sims' method of compressing a sponge saturated with a strong solution of gum arabic, impaled upon a wire compressed with cord, and then dried and smoothed, did not afford such a good tent as one made after his own method, which is as follows: 3rd. Wind a cylindrical piece of sponge *saturated with water only*, and without any stylet, with a piece of fishing line to which a six-pound weight is attached. This compresses it thoroughly, and its form is easily given by the fingers during the process of rolling—the surface can be smoothed by sandpaper. The tent should be of a uniform size from end to end, otherwise the cervical canal will not be equally dilated throughout. The tent should be made of fine strong sponge, and the use of medicating agents avoided, as they set the sponge and render their removal difficult. The tent should be straight and rapidly introduced into the canal of the neck and uterus. It should be coated with soap and fine salicylic powder rubbed in over the surface, so as to form a disinfecting paste, which allows of its being retained 48 hours without giving rise to any unpleasant odor. A strong compressing forceps of a proper shape is used to place it in situ, and the injection of a little warm water renders its retention secure in a couple of moments. If it should cause pain an opium suppository can be resorted to for its relief.

Time of removal.—This is a very important point, as, if it is removed at the end of 24 hours, it will cause hemorrhage, on account of the spongioles which have become imbedded in the mucous membrane dragging away the entangled tissue and thus leave a raw surface. The uterus also up to this time possesses its contractive power, while after 48 hours it loses it, all pain has ceased, and the removal of the tent is easily effected; and if a second tent is necessary it may be introduced immediately after washing out the cavity of the uterus.

Among the advantages claimed for the sponge tent are slowness of dilatation—not slowness of expansibility. It has, also, a disintegrating power over morbid tissue, causing them to slough off after dilatation has destroyed their vitality. Sponge tents will not slip out as do laminaria, and they also permit of the escape of fluids through their pores.

Thus the sponge tent is not only used as a means of exploration, but also as a valuable remedial agent, as before stated, and by its stimulating effect upon the tissues causes decrease of size in cases of chronic metritis and hyperplasia. They are often of great service in cases of uterine hemorrhage due to granulations of the mucous membrane—their action destroying the fungoid growths and thus curing the patient. In some case pediculated fibroids have been destroyed and removed by the finger without much trouble.

Society Proceedings.

MEDICO-CHIRURGICAL SOCIETY OF MONTREAL.

Stated Meeting, Sept. 26, 1884.

T. A. RODGER, M.D., PRESIDENT, IN THE CHAIR.

Enlargement of the Spleen.—Dr. ARMSTRONG exhibited a boy 11 years of age, whose spleen

extended a couple of inches below the umbilicus. Enlargement dated from an attack of typhoid fever three years ago. The lad's mother says that on three occasions he has had attacks of unconsciousness, followed by paralysis of one side, and lasting a few days. There is a diminution of red-blood corpuscles and an increase of white. Improvement in general health had followed the use of Liq. Arsenicalis, and for a time the spleen became smaller.

Dr. WILKINS said he had attended the boy off and on for years. He was not sure if what he took to be an attack of typhoid were that, as six or seven months after the boy had a feverish illness, when he became semi-comatose for several days. The spleen at times reached below the crista ilii. Had repeatedly examined the blood; usually there were but one-quarter the normal number of red-blood corpuscles. Found no absolute increase of white-blood corpuscles. For a time quinine caused the spleen to get smaller.

Traumatic Tetanus in a Woman aged 40.—Dr. WILKINS exhibited part of a foot, also a piece of sole leather, the size of half a pea, which had been driven up into the foot by standing on a nail. This occurred on Saturday. The following Wednesday she was seized with spasms, and removed to hospital on Thursday. It was thought that a piece of the nail might be in the soft tissues of the foot, but after careful examination by Dr. Roddick, nothing was found; but it was deemed wise to remove two toes and the parts for one inch back. On dissecting the piece removed, Dr. Wilkins found the bit of hard leather resting on a nerve filament. The symptoms were not much lessened by the operation, the patient dying thirty hours later, probably from asphyxia. Dr. Wilkins said if he had another similar case he would try excising the nerve higher up, say in the leg.

Dr. TRENHOLME said he had had a case very like this one, where a boy got a splinter of wood into his foot. The splinter was pulled out and the parts healed nicely, but in ten days tetanic spasms, followed, ending fatally. Dr. Trenholme found a very small bit of wood, surrounded by a drop of pus, in the foot. Dr. Fuller, who performed the *post-mortem*, traced the nerve from the wound to the base of the brain, and found it all inflamed. In the spine, the membranes, as well as the cord, were congested. Some of the fluid from the spinal canal was injected into a dog; paralysis followed, which lasted several days.

Dr. BELL said that he had seen several cases of traumatic tetanus in the hospital. A man was stabbed in the instep with a pitchfork, a bit of stocking was found at the end of the wound. Another case was that of a girl, who had run a nail into her heel. After death he dissected the parts, and found a sliver of iron resting against a nerve filament, which was swollen and œdematous. A third case was where a man was hurt from a fall on the buttocks; symptoms of a deep-seated suppuration ensued. The man died seven days after the injury. No *post-mortem* was allowed in this case. On theoretical grounds, Dr. Bell believed success might follow amputation and keeping the patient well under the influence of opium—in fact, pushing the opium as far as possible.

Dr. HENRY HOWARD hoped surgery would prove an aid in these cases, yet he doubted if it were possible. He related several cases which had been under his care—one being that of a son of the late Dr. Mount's, where tetanus followed a scratch on the buttock.

Uterine Myoma; Removal; Death from Exhaustion. Dr. WM. GARDNER exhibited the specimen, which was about the size of an orange. Patient, aged 52, had had severe hæmorrhages for four or five years. On examination, the above tumor was found, and. although very weak, it was deemed wise to remove it, which was done piecemeal. Patient did well for 36 hours, dying from exhaustion 56 hours after the operation. The discharges were never at any time fœtid. The womb was irrigated repeatedly, and at times continuously, by means of the double irrigation tubes. Dr. Browne assisted at the operation. Dr. Gardner said it was well known that uterine fibroids frequently kept up menstruation for long after the usual time, and were often the cause of the menorrhagias seen at the menopause. Profuse menstruation at the climacteric is not normal, and should be followed by a uterine examination in order to prevent operations being performed upon women already much weakened.

Dr. TRENHOLME thinks one is not warranted to explore the uterus by the occurrence at this period of menorrhagia alone. The question of operating for fibroids depends upon whether we

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This dressing should be removed the following day. The uterus and vagina is thoroughly cleaned and then apply the zinc caustics. These are made of two degrees of strength, 3 v to aq ℥ j, and equal parts by weight of zinc chloride and water. A pomade of bicarbonate of soda in vaseline, 1 to 3, and a 30 per cent. solution of the same salt in water is placed ready for use.

The cavity being ready for the caustic the vagina and labia are protected by the pomade. Great care is necessary to protect the meatus and adjacent tissues from the action of the caustic.

The strength of the caustic to be used is determined by the thickness of the tissues to be acted upon, less than 5 or 6 millimetres in thickness would not bear the use of stronger caustic. The weaker solution is also generally used upon the vagina. The caustic is applied on masses of cotton, which are packed into the cavity and the surface of the packing, and about 2½ centimetres of the upper part of the vagina is filled with absorbent cotton saturated with the bicarbonate of soda solution.

The pain following the operation if severe can be relieved by an hypodermic of morphine.

On the 2nd or 3rd day the cotton is removed from the vagina and also from the uterine cavity, if loose ; if still adherent it is well to wait a day or two more. On examination, a firm, white, cement-like surface is seen. In from 5 to 10 days this slough will separate, and at no time should any force be used to effect its separation.

The exfoliation of the slough may be encouraged by very gentle douches of carbolic solution. —The tendency to bleeding during the stage of sloughing is much lessened by the use of opiates and keeping the patient perfectly quiet in bed. The bladder should be emptied by the catheter— Should the hemorrhage be severe, some form of astringent can be used. Cicatrization is complete in from two to four weeks, leaving a contracted, pale, soft, velvety membrane, free from any odor or discharge.

This plan of treating such cases of cancer of the uterus has much to commend itself to our favor and imitation, and the issue of several cases reported are most encouraging.

GREAT SURGICAL OPERATION.

The Dublin *Medical Press and Circular* of October 1, 1884, says:—

The current number of the *Independence Belge* mentions a great surgical operation which has just been performed in Brussels by Dr. Langenbusch, of Berlin, who must not, however, be confounded with his eminent fellow-citizen Langenbeck. The subject of this daring and successful proceeding was M. Eugene Anspach, the Deputy Governor of the National Bank of Belgium, who has been for many years suffering from a collection of gall stones, which have kept him in a state of aggravated suffering (*douleur atroce*), and have latterly defied all measures of relief. M. Langenbusch, summoned specially from Berlin, proposed to lay open the gall bladder, with antiseptic precautions, admitting, however, that he had only performed this operation four times, and that but one of these cases recovered. M. Anspach's family and friends were much dismayed at this announcement, and begged that the operation should not be performed. M. Anspach was firm, and reflecting that without it he would not live long, and that in the meantime his life would be worse than death, decided on the operation. Even at this supreme moment the banking mind asserted itself, and M. Anspach remarked, "after all, one in four is 25 per cent., and that is a fine dividend." "You have had one recovery already, doctor," he remarked, "and I will be the second," an element of confidence which no doubt had something to say to the result. The operation was performed on the 9th September, and 125 calculi were extracted from the gall bladder. M. Anspach suffered a good deal after the proceedings, but is now out of danger and in complete comfort. We trust he will long live to enjoy the reward of his own pluck and of the skill of his surgeon. It is a curious circumstance that this operation has to a certain extent been anticipated here. The late Sir Timothy O'Brien suffered from gall stones, and the late Sir Dominic Corrigan worked down into the gall bladder by means of a potash issue, and removed them. Sir T. O'Brien's recovery was complete.

IODOFORM IN ERYSIPELAS.

There would seem to be no limit to the uses to which iodoform may be put in restoring the buman form divine to its pristine vigor. In the May number of the *Practitioner*, Mr. Clark Burnam commends it for erysipelas. He used a solution of one part of iodoform in ten parts of collodion, and found that after a single application of this the pain and heat were relieved, and that the tendency to spread ceased. This good result could not be attributed to the internal treatment adopted nor to the collodion, because Sir James Paget expressly states that it does not check the spread of the disease.—*Lond. Med. Times.*

DOCTORS WHO DIED OF CHOLERA.

Of one hundred and thirty-nine physicians engaged in attending cholera patients in Naples under the White Cross Society, twenty died.

EXCESSIVE SWEATING.

Sponging the surface of the body with a solution of quinine in alcohol—one drachm to the pint —is now recommended for excessive sweating. It is a remedy that has long yielded us good results. —*American Practitioner.*

THE CANADA MEDICAL RECORD

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FRANCIS W. CAMPBELL, M.A., M.D., L.R.C.P. LOND

R. A. KENNEDY, M.A., M.D.

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MONTREAL, NOVEMBER, 1884.

THE MONTREAL GENERAL HOSPITAL.

At the quarterly meeting of the Life Governors of this Institution, held on the 12th instant, there was a very large attendance. This was in anticipation of the election of Drs. Gardner and Major, to the position respectively, of Gynecologist and Laryngologist to the Hospital, and also the election of two gentlemen to replace them on the Out door Staff. The candidates for these vacancies were Drs. Bell, Blackader and Campbell. To understand perfectly the situation it must be stated that it was necessary to pass new by-laws, creating two specialists, before Drs. Gardner and Major could receive the position of specialists which they desire. At the same time, it was intended to so amend the by-laws as to call the Outdoor Staff, Assistant Physicians and Surgeons. In August last, at the quarterly meeting, these amended by-laws were submitted. There was considerable opposition to their being passed at that meeting, not because of direct opposition to the changes proposed, but because it has generally been understood that the August meeting will not transact any but ordinary routine business. This tacit understanding was arrived at on account of the fact that so many Governors are generally absent from the city at that time. The Medical Governors were, however, in a majority at that meeting, and most unwisely, we believe, insisted on a vote being taken. They carried their point, and the amended by-laws were passed. To make them legal they require to be also passed by the Corporation of the Hospital. This body consists of all persons who contribute five dollars yearly to the Institution. By advertisement, a meeting of this body was called for half an hour later than that at which the Governors met. In point of fact no members of Corporation presented themselves other than the Governors already in session, and that body, at the proper time, converted themselves from Governors to members of Corporation, and the meeting so constituted proceeded to business. The amended by-laws were then submitted and passed. No one questioned the legality of the proceedings, and as the November quarterly meeting drew near the various candidates entered upon a most energetic canvas. We have already said that we believe the action of the Medical Governors in forcing a vote in August against the wishes of many of the Lay Governors was a mistake. The sequel proves that our opinion is correct. Their action was very generally discussed and as generally condemned. The result was that the evening previous to the November quarterly meeting Mr. D. A. P. Watt, a Governor of the Hospital, who has always taken a warm interest in the institution, notified the President, Mr. Andrew Robertson, that he would protest against any election taking place, upon the ground that the by-laws had been illegally passed. Mr. Watt held that the meeting of the Corporation was illegal, inasmuch as no provision was made in the by-laws of the Hospital for holding special meetings of Corporation. The President at once submitted the question to Mr. S. Bethune, Q.C., the Counsel of the Hospital, and only a few hours before the time the Governors were to assemble for the purpose of election, received his reply. This was read to the meeting, and endorsed fully the objection which Mr. Watt had raised. The President therefore ruled that an election could not take place, and the meeting very wisely endorsed his ruling. There was much disappointment of course on all sides, but the general feeling was that, in the face of the opinion expressed by Mr. Bethune, it would have been most unwise to have acted contrary to it. The large meeting then adjourned. The matter must lie in abeyance till next May, when the by-laws will again be submitted to the Governors and subsequently to the annual meeting of the Corporation. We have no doubt but that both these bodies will pass them.

While writing upon the Montreal General Hospital we may say that much surprise is

being expressed by many Governors that the resignation of Dr. Osler was not placed before them at the November meeting. Some even have stated their belief that his position is *de facto* vacant, inasmuch as he has accepted an appointment in another country, and has taken up his residence there. The fact is that Dr. Osler applied to the Committee of Management to allow his appointment to continue till May next, when it expires unless re-elected. The grounds upon which he asked for this favor, are, we think, hardly legitimate, but after the good service he has done the Institution they could not with good grace have refused the request. We think, however, Dr. Osler made a mistake in asking for it.

Some are inclined to think that other reasons than those named by Dr. Osler in his letter to the Committee induced him to ask the favor of his continuing on the Staff till May. One of these is believed to be the desire some of his late colleagues had to put off the election for his vacancy as long as possible. If the election had taken place in November, Dr. Campbell might have been elected. If it did not occur till May, it would give Dr. Campbell's opponents two chances of defeating him, he being one of the candidates for the vacancy on the Outdoor Staff which was presumed to occur in November; if successful then, they would have another chance against him in May, if he competed then for the Indoor position.

We believe the Governors of the Hospital are alive to their duty in its present condition, and propose doing it, fully and thoroughly. The Medical Staff, or at least most of them, have been running the Institution pretty much as they liked, and at this moment many of the Governors look upon them with anything but favor. It is an old saying, give a person sufficient rope and he will hang himself. The Medical Clique have taken plenty of rope—we warn them to take care they don't get their heads too far into a noose. It might suddenly tighten and strangle them.

"PEPTONIZED" COD-LIVER OIL AND MILK.

While the value of cod liver oil in pulmonary troubles is beyond question the fact is about equally well-established that the cases in which it is most clearly indicated are those least competent to assimilate or even tolerate an agent which calls for the exercise of full digestive activity to secure its effective action. To meet this difficulty many efforts have been made, with more or less success. In the preparation now offered us, however, we feel confident a great advance has been made. Not only is the oil peptonized, making its assimilation easy to even the most delicate stomach, but the taste— so intolerable to a great number of patients—is completely masked by compounding with it probably the best and most pleasant vehicle available, viz., milk. This latter is condensed *in vacuo* to about the specific gravity of the oil itself, and so thoroughly incorporated with it, by a new and original process—as to completely overcome the tendency to separation so characteristic of the ordinary emulsion. The therapeutic value of the preparation has been fully demonstrated by a three years' test in leading American hospitals, and by a mass of clinical evidence from individual practitioners. In Britain this preparation has been most favorably received, and we have no doubt that in Canada also it will have full and careful test at the hands of the profession.

GOLD MEDAL AWARDS TO UNITED STATES PRODUCTS AT INTERNATIONAL HEALTH EXHIBITION, LONDON, 1884.

Among the food products exhibited at the Internationl Health Exhibition, London, 1884, from the United States, were *Beef Peptonoids* and *Maltine;* both of these preparations carried off the only Gold Medal and highest Award against numerous competitors in their respective classes. All food preparations were critically analyzed at this Exhibition by a jury composed of the best chemists in the country.

NÆVUS TREATED SUCCESSFULLY BY LOCAL APPLICATION OF LIQUOR ARSENICALIS.

Mr. W. J. Beatty, L.R.C.P., writes to the *British Medical Journal:* "In my hands it has succeeded admirably, my last eight cases having been cured perfectly and painlessly by the local application of this remedy. The preparation I use is the ordinary liquor arsenicalis of the Pharmacopœia, with which the nævus is to be painted night and morning until ulceration takes place: and I find that the cure is effected in from three to five weeks.—*Louv. Med. News.*

THE CANADA MEDICAL RECORD.

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Original Communications.

NOTES ON TWO CASES OF LEAD POISONING.

By L. D. MIGNAULT, M.D.

Read before the Medico-Chirurgical Society of Montreal, December 12, 1884.

The above title will sufficiently explain that this paper is merely a brief record of two forms of this common affection which have come under my notice. The chief points of interest being to my mind in the extreme nature of the symptoms, and at the same time their ready yielding to therapeutic measures. The occurrence of lead poison and lead colic is by no means rare, but perhaps the sequences are not often met with in so marked a form as in the cases which I am about to relate.

Marie E. D., æt. 16, entered Hotel Dieu, May 1st, 1882. First saw her May 3rd.

She is a slender, emaciated girl, and complains of great debility, with colicky pains in the abdomen, and loss of appetite. At the same time she is unable to use either of her hands, even to dress herself, and they hang powerless at right angles whenever the arm is raised.

Upon examination there is a characteristic blue line along the gums, and tongue is heavily coated.

The extensor surface of the forearms, especially the right, is extremely wasted, in fact there is perfect flattening of the surface and no appearance of the usual fullness at the elbow, the atrophy resembling that of advanced cases of progressive muscular atrophy.

The flexor surfaces are also some wasted, as are also the muscles at the ball of the thumb.

On being told to seize any object wiht the fingers there is immediate flexion of the hand, and the fingers are thus prevented from closing upon the palm. As above stated, when the arm is raised, the wrist drop is most complete and characteristic, and the extensors are perfectly powerless to produce the slightest effect upon the hand.

Patient states that this present condition of affairs has lasted since Feb. 1st, when all symptoms were as perfectly characterized as at present.

Since then, and before that date, she has been under medical treatment, having been given iron and stimulating liniments to the arms, but all to no avail. These statements were borne out by inquiries among her relatives.

We had clearly here to deal with a case of *lead poisoning* of the most typical character, and I set myself to treat it accordingly.

I therefore prescribed laxatives, with 5 grains of pot iod. every four hours.

I at the same time applied galvanic electricity to the arms (app. goiffe), primary current.

At first and for one week the electric current seemed to have little or no effect, and no response was observed,—in fact the muscles were as insensible to the electricity as if the arm was lifeless. There was indeed degenerative re-action. Treatment continued all May. I state effects as noticed.

June 1st. There is now a marked effect; after a week the primary currents gave evidence of slight effect; the blue line is beginning to disappear, and the constipation is much relieved.

July 1st. Digestion and appetite perfect, and the muscles regaining power. The hands can be used to a certain extent. The effect of the current is most marked,

The symptom is of especial value, because it is early, and furnishes an indication for treatment long before the other signs—such as cyanosis or pallor of the face, thready pulse, cold extremities etc.—show themselves.

Another "single symptom" of importance is *the presence of a pause at the end of expiration.* This serves to distinguish between laryngeal catarrh and croup, and, when well marked, absolutely excludes the latter. In examining for it, however, the room should be perfectly still, and the ear should be placed close to the patient's mouth. The author relates how he succeeded in diagnosing laryngeal catarrh from the mere presence of these pauses, in a child who had been ill three days with stenotic breathing, hoarseness, and great somnolence. The laryngoscopist who was called in, confidently expected to find well-marked false membranes; but no such were visible, and the child was well in a few days. Another symptom of which it is important to understand the significance is the so-called *respiratio stridula.* It consists of slightly noisy, but otherwise normal inspiration, and a loud bleating, interrupted (staccato) expiration; it continues day and night, sleeping and waking, with very rare free intervals of ten minutes or a quarter of an hour. It begins soon after birth, and lasts for from eight to twelve months. To the physician unfamiliar with the condition it appears to be a serious affair, and to demand active measures; but, as a matter of fact, it involves no dyspnœa, and does not affect the nutrition or development of the child; moreover, it is very obstinate to treatment, and ultimately ceases of its own accord, The author regards it, therefore, as being within physiological limits, and recommends no treatment,

The next series of symptoms relates to the brain and the first is *a remarkable drowsiness which makes its appearance without fever or other disturbance and persists for some time.* Pyrexia, from any cause, is enough to produce drowsiness in a child; but when the latter coincides with a normal temperature, and continues so for twenty-four to thirty-six hours, it becomes a most valuable symptom of commencing brain disease; and the same holds good when the drowsiness sets in upon convalescence from fevers when pyrexial stages are passed. The only other conditions that can produce this apyrexial drowsiness are narcotic poisons and uræmia, but these are easy to differentiate. Another single symptom of great value in the early diagnosis of brain-disease is *a very elevated incompressible anterior fontanelle.* This indicates not only increase of the contents of the skull, but also that that increase is due to something more dangerous than simple hyperæmia. It is all the more valuable when the child is wasted from any cause. When the swelling is so great as to resemble a wedge, and no trace of pulsation is present, the disease is probably either intermeningeal hæmorrhage or prurulent meningitis of the convexity.

The next series of single symptoms relates to the *character of the child's cry.* 1. A violent shrill cry, lasting two or three minutes, marked by anxious expression, and occurring about an hour after the child has fallen asleep, and repeated night after night, is probably due to the action of dreams on an irritable nervous system. It can be cured by the administration of a full dose of quinine an hour before bedtime. 2. A cry, lasting frequently five to ten minutes, and recurring periodically several times in the twenty-four hours, indicates, more especially if dysuria have been observed, spasm of the bladder, and can be cured with a dose of belladonna at bedtime. 3. The cry accompanying defæcation indicates, as is well known, fissure of the anus. The author says nothing of operation for this, and recommends aperients and an ointment of zinc and belladonna. 4. "A violent, almost continual cry, the hands grasping the head, which is rolled round and round, and buried in the pillow," in the little children, indicates otalgia. 5. A cry, lasting days or weeks, increased on movement, and associated with profuse sweating and fever, is rare, but may indicate acute general rickets. 6. The cry associated with chronic sleeplessness is difficult to relieve, though it frequently appears to have no ill-effect upon the child's nutrition. In some cases it appears to have been inherited, as one of the parents has occasionally been observed to be the subject of insomnia or hemicrania.

The next series of single symptoms have no particular interdependence. Amongst these are the following: 1. A striking collapse and immobility of the nostrils almost always indicates hypertrophied tonsils. 2. A weakness and immobility following a short illness, and out of all proportion to such a slight cause, is very frequently the first symptom of infantile paralysis. 3. A single symptom of importance, in a condition which is sometimes void of symptoms (congenital idiocy), is the habit the infant has of perpetually and automatically placing the hands in front of the face. 4. A stiffness of posture and gait, with a pained expression on changing position, is an early symptom of spondylitis. 5. Obstinate vomiting after every kind of food, and lasting for weeks, indicates, in a child whose fontanelles are closed, and whose cranial circumference is large, the supervention of acute upon chronic hydrocephalus. The author, in conclusion, is careful to give the oft-repeated warning against diagnosing a disease from a single symptom—a real pathognomonic symptom being rare. He claims for his observations, where these are original, the merit of facilitating diagnosis at a stage when treatment is likly to be followed by rapid benefit.

The painful burns produced by nitric acid may, according to a writer in the *Chemical News*, be successfully treated by a dilute solution of sulphurous acid applied instantaneously.

EPILEPSY.

By William Pepper, M.D., LL.D., Professor of Principles and Practice of Medicine, University of Pennsylvania.

Abstract of Paper, read before the Section on Practice of Medicine at American Med. Association.

In a purely clinical discussion of epilepsy our conception of the disease must be a broad one. Strictly, cases of organic disease should be excluded. This is, however, sometimes difficult. There is no trouble in those instances in which the common symptoms of brain tumor are present, but in those cases in which epilepsy follows sunstroke, the distinction is not so clear.

Hysteria should also be excluded. While typical epilepsy and typical hysteria are readily distinguished, yet there are many facts showing their analogy. A case was then quoted of hysteria associated with neurasthenia, apparently dependent upon membranous enteritis, with great prominence of the vaso-motor symptoms, and the appearance of crops of stigmata before the attack.

Both epilepsy and hysteria represent conditions of malnutrition with morbid sensibility and irritability of nerve tissue brought about in the most varied manner. In hysteria it would seem that the ganglionic nervous tissue is especially vulnerable, and the gray matter within the encephalon less so, though instability of this may co-exist. An attack may be induced through violent disturbance of ganglia controlling intra-cranial circulation and consequent discharge from unstable gray centre in cortex or elsewhere. Epilepsy would seem to depend upon a supremely unstable condition of one or more areas of gray matter within the encephalon, rendering it liable to sudden and violent discharges. This instability may be brought about in very varied manner. The most prominent influences are heredity, nervous exhaustion, as from over-growth, overstrain or exhausting illnesses, shock or sudden powerful impressions, as from physical injury, with or without distinct lesion of cranial bones, sunstroke, purely psychical shocks, as from fright, instability of circulation, with disturbed nutrition of the brain as in heart disease; and in connection with heart disease there is a possibility of minute embolisms interfering with the nutrition of small areas, prolonged peripheral irritation, especial reference being made to chronic catarrhal irritation of the gastro-intestinal tract. A consideration of these points teaches that those cases grouped under the name of epilepsy are not afflicted with a single definite disease, but they exhibit in common merely a state of impaired nutrition and morbid instability of the gray matter, varying greatly in different cases. In some cases there are probably minute molecular changes in the nervous tissue. In a large number of cases, however, the recurring convulsions are connected, not with irregular advancing morbid tendency, or irregularly progressive anatomical change, but with occasional and irregular operation of those widely different causes, which are calculated to disturb the weak centre and induce explosive discharges.

The evil effects of habit are prominently exhibited in this disease, so that if the instability cannot be reduced, and the provoking causes removed, the attacks will be more and more readily induced, until they will at last be excited by almost imperceptible causes.

It is important to recognize the degree of instability in these cases. Every one is liable to convulsions; it is merely a question of the provoking cause required. Provoking causes cannot be found in all cases of epilepsy, but the more closely they are sought for, the more frequently will they be found. A careful study in this direction is of the greatest importance in every case.

Among the most frequent provoking causes may be mentioned indiscretions in diet or improper food. This may act in different ways, by exciting local irritation of the mucous membrane which will act in a reflex manner, or it may induce a condition of toxæmia from the admission to the blood of imperfectly elaborated elements, or from the failure of the emunctories to remove some product of mal-assimilation. In many of the cases seen by Dr. Pepper the attacks bore a close analogy to the spells of vertigo induced in lithæmic patients by indiscretions of diet. In this connection allusion may be made to the fact that the injection of the normal digestive ferments into the general circulation is capable of inducing serious nervous symptoms, even convulsions and death.

Scarlatina is frequently followed by epilepsy. In some cases this is explained by the tendency to wide-spread tissue change, so that impaired nutrition of the gray matter might be expected to occur at times. In other cases this disease may act by leaving such a degree of renal insufficiency as will, under comparatively slight causes, lead to toxæmia, from the retention of mal-assimilated materials. It does not seem necessary that such a condition should reveal itself by the presence of albumen in the urine, although Huppert states (*Archiv. fuer Psychiatrie*, 1877, p. 169) that immediately after an epileptic attack albumen is almost invariably present, and hyaline tube casts can frequently be found.

In those cases in which the morbid state of the nervous system has been brought about by sunstroke or exposure to excessive heat it will be often found that attacks will be induced by undue exposure to the rays of the sun, or even to intense light. When the nervous instability is associated with cardiac lesion, I have frequently noticed that muscular exertion or excitement of the circulation directly induced the attacks. In all cases mental excitement or too close application, or sexual excess, will favor the occurrence of the seizures. These causes are operative on account of the constitutional susceptibility.

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EPILEPSY.

By William Pepper, M.D., LL.D., Professor of Principles and Practice of Medicine, University of Pennsylvania.

Abstract of Paper, read before the Section on Practice of Medicine at American Med. Association.

In a purely clinical discussion of epilepsy our conception of the disease must be a broad one. Strictly, cases of organic disease should be excluded. This is, however, sometimes difficult. There is no trouble in those instances in which the common symptoms of brain tumor are present, but in those cases in which epilepsy follows sunstroke, the distinction is not so clear.

Hysteria should also be excluded. While typical epilepsy and typical hysteria are readily distinguished, yet there are many facts showing their analogy. A case was then quoted of hysteria associated with neurasthenia, apparently dependent upon membranous enteritis, with great prominence of the vaso-motor symptoms, and the appearance of crops of stigmata before the attack.

Both epilepsy and hysteria represent conditions of malnutrition with morbid sensibility and irritability of nerve tissue brought about in the most varied manner. In hysteria it would seem that the ganglionic nervous tissue is especially vulnerable, and the gray matter within the encephalon less so, though instability of this may co-exist. An attack may be induced through violent disturbance of ganglia controlling intra-cranial circulation and consequent discharge from unstable gray centre in cortex or elsewhere. Epilepsy would seem to depend upon a supremely unstable condition of one or more areas of gray matter within the encephalon, rendering it liable to sudden and violent discharges. This instability may be brought about in very varied manner. The most prominent influences are heredity, nervous exhaustion, as from over-growth, overstrain or exhausting illnesses, shock or sudden powerful impressions, as from physical injury, with or without distinct lesion of cranial bones, sunstroke, purely psychical shocks, as from fright, instability of circulation, with disturbed nutrition of the brain as in heart disease; and in connection with heart disease there is a possibility of minute embolisms interfering with the nutrition of small areas, prolonged peripheral irritation, especial reference being made to chronic catarrhal irritation of the gastro-intestinal tract. A consideration of these points teaches that those cases grouped under the name of epilepsy are not afflicted with a single definite disease, but they exhibit in common merely a state of impaired nutrition and morbid instability of the gray matter, varying greatly in different cases. In some cases there are probably minute molecular changes in the nervous tissue. In a large number of cases, however, the recurring convulsions are connected, not with irregular advancing morbid tendency, or irregularly progressive anatomical change, but with occasional and irregular operation of those widely different causes, which are calculated to disturb the weak centre and induce explosive discharges.

The evil effects of habit are prominently exhibited in this disease, so that if the instability cannot be reduced, and the provoking causes removed, the attacks will be more and more readily induced, until they will at last be excited by almost imperceptible causes.

It is important to recognize the degree of instability in these cases. Every one is liable to convulsions; it is merely a question of the provoking cause required. Provoking causes cannot be found in all cases of epilepsy, but the more closely they are sought for, the more frequently will they be found. A careful study in this direction is of the greatest importance in every case.

Among the most frequent provoking causes may be mentioned indiscretions in diet or improper food. This may act in different ways, by exciting local irritation of the mucous membrane which will act in a reflex manner, or it may induce a condition of toxæmia from the admission to the blood of imperfectly elaborated elements, or from the failure of the emunctories to remove some product of mal-assimilation. In many of the cases seen by Dr. Pepper the attacks bore a close analogy to the spells of vertigo induced in lithæmic patients by indiscretions of diet. In this connection allusion may be made to the fact that the injection of the normal digestive ferments into the general circulation is capable of inducing serious nervous symptoms, even convulsions and death.

Scarlatina is frequently followed by epilepsy. In some cases this is explained by the tendency to wide-spread tissue change, so that impaired nutrition of the gray matter might be expected to occur at times. In other cases this disease may act by leaving such a degree of renal insufficiency as will, under comparatively slight causes, lead to toxæmia, from the retention of mal-assimilated materials. It does not seem necessary that such a condition should reveal itself by the presence of albumen in the urine, although Huppert states (*Archiv. fuer Psychiatrie*, 1877, p. 169) that immediately after an epileptic attack albumen is almost invariably present, and hyaline tube casts can frequently be found.

In those cases in which the morbid state of the nervous system has been brought about by sunstroke or exposure to excessive heat it will be often found that attacks will be induced by undue exposure to the rays of the sun, or even to intense light. When the nervous instability is associated with cardiac lesion, I have frequently noticed that muscular exertion or excitement of the circulation directly induced the attacks. In all cases mental excitement or too close application, or sexual excess, will favor the occurrence of the seizures. These causes are operative on account of the constitutional susceptibility.

It is often stated that epileptics are in full health. This certainly does not accord with my

Dr. P, is an original member of Bishop'sC ollege Faculty of Medicine, and holds now the chair of Surgery. He is considered a successful lecturer. He is also the Medical Secretary of the Western Hospital, to which Institution he devotes much attention.

JAMES C. CAMERON, M.D., M.R.C.P.I.

This gentleman, whose residence is in Belmont Park, possesses one of the, if not *the*, nicest office in the city. He has a large practice, yet takes an active part in what may be termed Medical life. He has been a member of Bishop's College Faculty for some years, and this winter lectures for the first time on "obstetrics." So far as I can learn, he is an excellent lecturer. He is also a good speaker, and sets forth his arguments with logical precision. He takes an active interest in the Medico-Chirurgical Society, of which last year he was one of the office bearers. He married a few years ago, the only daughter of James Dakers, Esq. The mansion in which he resides is one of the finest and most beautiful in Montreal.

GEORGE W. MAJOR, M.D.

My friend Major is now a specialist, and a good one I believe. I think he is to be congratulated on both these points. On the first, because it enables him to get fees, which makes the good old-fashioned family doctor's teeth water, and on the second because some specialists are humbugs. Dr. Major was for the first thirteen years of his life a general practitioner, and such men are generally the best specialists. He is also a bachelor. It has often struck me how many Bachelor Doctors we have in Montreal. At one time it was thought a Doctor should be married, but, judging from the success which attends our Bachelor physicians, such is not the prevailing opinion now. Still a wife is a good possession for any man to have, and I don't think Doctors any exception to the rule.

RICHARD A. KENNEDY, M.D.

Dr. Kennedy is a most conscientious practitioner, and has attained a large measure of success. His patients with good reason place great reliance on his judgment. His friends regret that of late years his health has been such as to necessitate that he should husband it. From this cause he had this year to cease active work in the Medical Faculty of Bishop's College, with which he has been connected from its organization.

FRANK J. SHEPHERD, M.D., M.R.C.S.E.

This gentleman is, I understand, devoting himself largely to Surgical practice, and since his connection with the General Hospital, now nearly two years, has shown that he is well qualified for such work. His position at McGill, and his family connections are sure to assist in his elevation. His present position is more than good, with every prospect of much advancement.

G. E. ARMSTRONG, M.D.

This gentleman may be styled "a pronounced success." Already he has as much to attend to as one man can conveniently look after. Such a measure of success does not come to any man unless he deserves it. The inference is that Dr. Armstrong deserves it, and I believe he does. He has a clear head, and a steady hand, which latter makes him peculiarly suitable for a Surgeon. He is one of the Attending Physicians to the Western Hospital, and is Professor of Physiology in Bishop's College. His weakness is a good horse, and he does not mind changing his animal as often as once a month, if in the change he thinks he is getting a better one. To have a horse which requires to be mastered is a fascination to him.

C. ALBERT WOOD, M.D.

This gentleman is a graduate of Bishop's College, and although not more than eight years in practice is already one of the busiest men in the city. He may be styled what is known as a bright man. In the suburb of the city where he resides he finds time to take a leading part in everything which tends to the elevation and amusement of its people. My friend is still a Bachelor. From some of the amusements in which I have lately seen his name figuring I don't think he can remain long so, or his heart must be harder than steel.

J. B. McCONNELL, M.D.

A comparatively young man, giving good promise of ere long taking a leading position. His reputation of a Botanist is, I think, only excelled by one or two men in the Dominion. He is Professor of Materia Medica and Therapeutics in Bishop's College.

A. LAPTHORN SMITH, B.A., M.D., M.R.C.S.E.

Dr. Smith is the son of the Deputy Minister of Marine and Fisheries, and is among the rising young Physicians of our city. That he possesses determination of character was well illustrated by

his marriage recently, under circumstances then detailed in *Gossip*. The union I have every reason to believe will be a happy one, and the Doctor and his pretty bride have the good wishes of all his medical friends. He is one of the junior professors in Bishop's College.

HERBERT L. REDDY, M.D., L. R. C. P. L., M.R.C.S.E.

Is the son of the late Dr. John Reddy, and has an excellent practice. Being descended from Irish parents he possesses the ready wit of his race, As yet he is a bachelor, but rumor has it is not to remain much longer so, having secured the heart of one of Montreal's fair daughters. The sooner all is *ready* the better.

FRANK BULLER, M.D., M.R.C.S.E.

Devotes his entire attention to the eye and the ear, and has every reason to be satisfied with the return these two organs have given him since he came to this city. Coming here a bachelor, and his prospects good, many a pair of eyes, sent toward him their most bewitching glances, but the ears did not hear the wished-for words. From without our city came his bride, who is a welcome addition to Montreal society. He takes an active interest in all that tends to promote good feeling among the profession, and is a liberal contributor, when the Doctors make a "call." Dr. Buller is connected with McGill College.

ALEXANDER PROUDFOOT, M.D.

Is also a specialist on the eye, ear and throat, and has quite an extensive practice. He married a Boston lady, who has endeared herself to a large circle of friends here, and takes an active interest in many of our charitable institutions. The doctor does not roll himself up in his professional rug, and look at every thing with a professional eye. He enjoys the socialities of this world, and, with his wife, are welcome visitors at many of our household entertainments. He lectures on his specialities in Bishop's College.

My task is ended, I have tried not to be inquisitorial, and I have put down naught in malice. Towards all whose names I have mentioned I bear nothing but good-will. Medical men are a kind of public property, and the brief sketch which I have made of some of Montreal's prominent physicians, will, I trust, not be unwelcome reading to those who take *Gossip*.—*Montreal Gossip, Dec.*, 25, 1884.

Progress of Science.

SURGICAL DELUSIONS.*

By JOHN B. ROBERTS, M.D., Professor of Anatomy and Surgery in the Philadelphia Polyclinic.

Many surgical theories and procedures have become traditional, and are accepted as true and correct, merely because reverence for antiquity, or careless acceptance, has not questioned their right to be classed as surgical facts. The present age is an incredulous one, and demands accurate investigation of all such claims. The field of investigation is large, for progress has been retarded by the influence of theorizing writers, with monochromatic vision, the example of non-seeing and non-looking devotees of the fetiches of surgical superstition and the convincing effect of a repetition of false statements. I shall select a few topics which have greatly interested me, and concerning which I probably differ quite widely from many of you.

CHLOROFORM ANÆSTHESIA.

Many still cling to the delusion that chloroform is a safe anæsthetic, because they have never seen a patient die from it. Is one man's experience to weigh against the physiological, the experimental, the clinical experience of the whole world? Dare we employ chloroform, instead of ether, when recognized authorities state that in chloroform anæsthesia death occurs without warning in the hands of experienced administrators; when some five hundred deaths have already been reported; when Schiff and Dalton reject it in physiological laboratories, because of its mortality, when the Scientific Grants Committee of the British Medical Association assert that chloroform is a more dangerous anæsthetic than ether.

Adherence to chloroform in the face of such facts is criminal when circumstances permit ether to be obtained. The assertion that it is often impossible to produce anæsthesia with ether, is the result of inefficient methods of administration. Ether, if given as chloroform, is and should be given, is, in truth, a useless anæsthetic, but given properly it is efficient.

VALUE OF STYPTICS.

The belief in the necessity of styptics is a delusion less dangerous than that first mentioned, but it is given more extended credence. Such agents are seldom, probably never, needed in general

*An abstract of the address in surgery of the Medical Society for the State of Pennsylvania, for 1884.

surgery to arrest hemorrhage. When ligatures' torsion or acupressure is not demanded, and such is seldom the case, unless the artery is as large as the facial, moderate, direct pressure, applied in dressing the wound, is the only hemostatic required. Styptics often do harm, and, as they are not needed, they should be discarded.

Fatality of Small Hemorrhages.

There is much misapprehension about the quantity of blood that a healthy person may lose with impunity. Many who often look with equanimity upon a parturient woman losing a pint of blood from the uterine sinuses would be dismayed at a woman losing half or a quarter that amount during removal of a tumor. While not advocating needless waste of blood, and especially in patients suffering surgical shock, I assert that there is an unnecessary fear of blood spurting from a few insignificant vessels. The largest artery can be controlled by pressure not greater than is used for ringing the electric bell in your hotel. Hence there is always sufficient power in your fingers to obviate fatal hemorrhage until strings can be obtained and applied.

Danger of Trephining the Skull.

The dislike to make exploratory incisions in closed fractures of the skull evinced by some surgeons, and the objection of others to trephining, and thus opening the diploic structure in open fractures, are delusions of a most disastrous tendency. To wait until symptoms of cerebral compression or inflammation have supervened is to lose the most favorable opportunity for mechanical relief. Such a Fabian policy is often followed by death. The treatment of open and of closed fractures of the skull should not be looked upon as very different, since, with the present improved methods of dressing wounds, the successful issue depends almost entirely upon the cerebral rather than the cranial phase of the injury. If such fractures as are usually seen in the skull were not in proximity to the brain, the surgeon would consider them almost trivial. The feature of closed fractures that render them so troublesome is the obscurity that accompanies them. I have for a number of years strongly advocated making closed fractures open ones by means of an exploratory incision, whenever there is a suspicion of the existence of depression or splintering. In open fractures operation to elevate depressed portions and get rid of splinters of the inner table thrust into the membranes should be undertaken rather than avoided. It is better to err on the side of of action than that of inaction. Careful manipulation and proper dressings at an early stage are sources of less risk than is incurred by the surgeon who leaves unseen and unsuspected fragments thrust into the membranes or brain.

Operative Delay in Strangulated Hernia.

A delusion of fatal issue is that leading to postponement of operative interference in strangulated hernia. Repeated attempts at forcible taxis and medical pow-wow-ing with temporizing measures have ended more lives than the use of the knife. Herniotomy done within twelve hours is almost always followed by recovery. Death is to be expected, however, if strangulation has existed for two or three days, and the gut has been bruised by violent manipulation in the endeavor to relieve the contraction by taxis. Moderate taxis under ether, a half day's treatment with cold applications and the internal use of morphia, and a second moderate attempt at taxis, followed, if unsuccessful, by immediate operation, is the sequence to be followed in strangulated hernia. When symptoms of strangulated hernia exist, the slightest fullness and tenderness in one groin over either of the rings is a sufficient localizing indication to warrant operation.

Operative Delay in Acute Phlegmonous Inflammation.

No insane delusion, no Spanish inquisitor ever caused so many hours of excruciating physical torture as the hallucination that acute abscesses and furuncles must not be incised until pointing has occurred. All the world knows that evacuation of imprisoned pus in phlegomonous inflammations means instant relief of the agonizing pain; yet how few of the profession early and freely incise such inflamed tissues unless they first see the yellow pus under the thinned skin or feel the fluctuation of the fluid in the abscess cavity. The pain is caused by the effort of the pus and sloughing tissue to escape. Is it not, then, more rational to make a free incision to-day than to wait till next week? Time and pain are both saved by early incision. If the cut is made before the pus has actually formed, so much the better.

Probably no form of abscess needs early and free incision more imperatively than that under the palmar fascia. Destructive burrowing of pus is prevented by this radical procedure, which also saves the patient many days of poultices and purgatory.

Operative Delay in Malignant Tumors.

Much bad surgery results from a delusive postponement of operative interference in malignant diseases. Instant removal is to be practiced in such cases, provided the patient is deemed fit to stand the surgical shock.

Necessary Fatality of Traumatic Tetanus.

That traumatic tetanus is of necessity fatal is a commonly-held opinion. Proper treatment is sometimes neglected because of this belief in its hopelessness. That the prognosis is extremely unfavorable I admit; but that cases of a severe type recover is undoubted. Chloral hydrate in

full doses has given the best results; but I do not propose speaking of therapeutics at this time. I merely wish to impress upon the profession the fact that a fair number of cases of traumatic tetanus have recovered.

Fatality of Pericardial and Cardiac Wounds.

The prevalent notion of the excessive danger of these wounds is delusional, at least in as far as it teaches that these structures will not brook surgical interference. The pericardial sac should be dealt with exactly as the pleural sac, by aspiration, incision, irrigation and drainage, according to the lesion. That simple puncture or aspiration of the heart itself is not accompanied by the expected risk to life has been pretty well shown, though I am not prepared to recommend its general adoption for trivial cardiac conditions.

Symmetry of Normal Limbs.

Another delusion still existing in many minds is that the extremities are usually of the same length. Clinical and anatomical investigation show that asymmetry in the length of normal limbs is of common occurrence. Therefore, measurements of the legs in cases of fracture are of little value, since it is impossible to know whether it is the femur of a long or short leg that is the seat of the injury.

Usefulness of Treating Vicious Union of Fractures.

It is a fact, not sufficiently appreciated, that many cases of deformity, from imperfectly-treated fractures of long bones, can be remedied by refracture. Over and over again have I seen cases of great disability and deformity cured by the application of sufficient force to break the callus uniting the misplaced fragments. Five to six months is not too late to resort to this expedient for correcting what otherwise must be a life-long evidence of defective surgical attendance.

There are many other prevalent surgical delusions, such as that bony union of transverse fractures of the patella and of intracapsular fractures of the femoral neck cannot take place; that chronic purulent discharges from the ear do not need active treatment; that hypermetropia and hypermetropic astigmatism can be properly estimated and corrected without paralyzing the accommodation; that it is improper to perforate the nasal septum in cases of great deviation; that crooked noses are not amenable to treatment; that corneal operations and cataract extractions should be treated by cotton padding and bandages to the eyes; that fractures should be treated with carved or manufactured splints.

While an earnest advocate of conservative and of reparative surgery, I believe that when operative surgery is demanded it should be aggressive. Delay, indecision and insufficiency impair the value of much surgical work, and are often the legitimate result of a superstitious faith in delusive surgical dogmas.—*Buffalo Medical and Surgical Journal.*

EPILEPSY TREATED WITH HYDROBROMATE OF CONIA.

By R. Norris Wolfenden, B.A., M.B. Cantab.

Being frequently disappointed in the action of potassium bromide in the treatment of epilepsy, I have lately been trying a remedy which I believe has not previously been used for this complaint. If the result is not quite so favorable as I might have expected, it is at any rate sufficiently good to warrant further trial, and I venture to place on record the notes of seven cases, in the hope that it may lead to further observations. We have all experienced the failure of potassium bromide until poured in in such quantity that often a condition of bromism is established. The unsightly blotches thus produced are a source of annoyance, especially to the better class of patients to whom personal appearance is a matter of concern. The following is a summary of my notes.

Case 1. A., girl, æt. eight; ill for two years, with epileptiform seizure, consisting of sudden flexions of the fore-arm (right), and a momentary vacantness of look; latterly the attacks had become more severe, culminating in loss of consciousness. Hydrobromate of conia, in doses of half a grain three times a day, was prescribed. During the first week she had six slight "fits." The dose was then increased to 5-8 of a grain, and during the succeeding week she had no attack. The medicine was continued for four weeks, during which time she had no fits at all, and slept better. The drug was then discontinued for some weeks, when she returned for further treatment. During its administration this patient complained of constant frontal headache.

Case 2. B., male, æt. 22; suffered from true epileptic fits, with typical aura, convulsions, unconsciousness, and great headache afterwards. One and a half grains hydrobromate of conia was ordered twice a day; during the week, this patient had nine fits. One and five-eighth grains was given twice daily for a week. During this time the patient had four bad fits. He was now, at his own request, put under potassium bromide, 3 j doses, three times a day, which kept them under.

Case 3. C., female, æt. 34; had been ill for four years, with one or more fits every week, typically epileptic. While taking potassium bromide they were kept under. I ordered one grain of hydrobromate of conia twice a day to commence with. For a week she was better, with only one slight attack. The dose was increased to 1¼ grains, and during the next fortnight she had one slight fit. She was then ordered back to bromide.

Case 4. D., girl, æt. 7; has seven or eight fits a week of typical epileptic character. She has frequently right-sided convulsions, the right arm being suddenly flexed. Sometimes these culminate in a real fit, with insensibility and rigidity. The child is an imbecile. As while under 3 j doses of bromide, the child still had frequent fits, I ordered 1-4 grain of hydrobromate of conia three

times a day. For the first week she had five fits (all occurring the day after the medicine was changed). For the second week there were seven fits. The drug was increased to 1-2 grain three times daily. For a fortnight she was absolutely free from fits, and then had seven. The drug was continued for some weeks, but she still had fits occurring at irregular intervals, which were refractory both to conia and potassium bromide.

Case 5. E., female, æt. 27; has typical epileptic fits, which continue under 3 j doses of potassium bromide. I administered 1-2 grain of hydrobromate of conia three times a day. During the next week she had no fits, and stated that she felt better, but with frequent headache. For a month while under this treatment she had no fit, but complained of more frequent headache, in consequence of which I returned to bromide.

Case 6. F., male, æt. 18; would have three fits a day, and then go for a week without. They were typically epileptic fits. While under large doses of bromide they were kept under, but not until an unsightly bromide rash was established, which was troublesome to the patient. For the first week, while taking one grain hydrobromate of conia twice daily, he had three fits. For a fortnight longer while under this treatment he had two fits; during the whole three weeks he therefore had five typical epileptic fits. As he stated that the drug made him feel giddy and weak, I returned at his own request to bromide, which, so long as he was entirely under its influence in large doses, seemed to ward off his attack. This young man was of weak intellect.

Case 7. G., female, æt 15; suffered from true epilepsy, dilated pupils; her optic discs were congested. She had not menstruated and had phthisical symptoms (cough, hæmoptysis, sweating). Half-grain doses of hydrobromate of conia were ordered three times a day. During three weeks she had no fit, which she stated was the longest time she had ever been without. I then lost sight of her.

The conclusions I draw from the treatment of these seven cases are—that the drug is undoubtedly serviceable in certain cases, and those in which it fails are cases of convulsions depending possibly on some gross lesion of the brain (cases 4 and 6). The slighter cases (*e. g.*, Cases 1 and 7) were distinctly benefited by it.

The drawbacks to the use of the drug appear in the complaints of headache, and where, in large doses, of giddiness lasting for an hour after taking it, with sometimes a suffusion and congestion of the conjunctivæ. In the doses in which I have given it there has not been noticed any cardiac or respiratory alteration. It is said that the dose of this drug must not exceed 4 1-2 grains in 24 hours, commencing with 1 1-2 grains. In my experience a child of eight bore 1 7-8 grains with only headache; a child of seven took 1 1-2 grains per diem. without any complaint; 2½ grains per diem were taken by a female without complaint; one adult man took 3 1-4 grains with impunity; in one case two grains per diem caused sickness, headache giddiness, and "weakness" in a man of 18. One and a half to two grains appears to be followed frequently by headache. I think the drug deserves further trial. Combined with constant application of the continuous current, I have successfully treated with it a case of hemichorea. In this disease, however, it would be rash to speculate whether the drug, the galvanism, or time was the most effectual in the cure.—*Practitioner.*

CLINICAL EXPERIENCE WITH THE NEW LOCAL AÆSTHETIC—MURIATE OF COCAINE.

By Samuel Theobald, M.D., Professor of Diseases of the Eye and Ear in the Baltimore Polyclinic and Post-Graduate Medical School; Surgeon to the Baltimore Eye, Ear and Throat Charity Hospital.

Within the past two weeks I have had the opportunity of testing, in a variety of cases, the action of the new local anæsthetic, the muriate of cocaine. Although the published experience of those who had experimented with it led me to expect marvelous things of it, my expectations have been fully realized. So far, I have made use only of a two per cent. solution, and of this I have usually put into the eye (for my employment of it has been confined to ophthalmic surgery) two drops at intervals of five minutes, making three applications in all, and beginning the operation at the expiration of fifteen minutes from the first instillation.

The first case in which I tried it was one in which a foreign body was adherent to the cornea. Three applications were made in the manner described, and fifteen minutes after the first one the pupil was found to be semi-dilated, and the cornea completely anæsthetic. The foreign body was removed without patient feeling the slightest discomfort. Since then I have used it in two other cases of similar character, and in each the same perfect anæsthesia was obtained. In one of these the foreign body had been in the cornea for several days, and the eye was considerably inflamed and very irritable; but, although the needle was quite freely used to detach the somewhat deeply imbedded particle of iron, the patient showed that the operation was entirely painless.

Having occasion to remove a pterygium from the eye of a very nervous, timid woman a few days since, I made the usual three applications and was then able to perform the operation with perfect ease, the patient assuring me that she felt no pain whatever.

Among the first cases in which I employed it was one of acute inflammatory glaucoma, upon which it was necessary to perform an iridectomy.

In this case four instillations were made; but, owing to the cloudiness of the cornea, the chemotic condition of the conjunctiva, and the high tension of the eye, the drug was, probably, very imperfectly absorbed (the pupil showed no mydriasis), and the anæsthsia obtained was not complete. Still the operation was finished without difficulty, and the patient asserted that it caused very much less pain than she had suffered from an iridectomy previously performed upon the other eye without anæsthesia.

The division of a dense capsular opacity, by means of a needle-knife introduced through the cornea, was done under its influence with much satisfaction, though the manipulation of the needle was not entirely unattended by pain.

A canaliculus was slit up in a very nervous woman after three applications, and the pain attending it was certainly much less than usual.

Several concretions of cheesy matter were scraped from the cornea of a young girl after the usual three instillations of the solution, and the operation caused no pain whatever.

A man with badly lacerated lids required not only to have four stitches introduced, but also to have the edges of the torn tissue, which were to be brought in apposition, freshened with the knife, as the injury had occurred some days previously. Here the solution was not only dropped into the eye, but applied by means of absorbent cotton to the lids. The operation upon the lower lid, to which the cocaine was doubtless more thoroughly applied, was evidently attended by but little pain, although the introduction of two sutures was required; but that upon the upper lid caused decidedly more suffering.

Two days since I enucleated an eye under its influence, and obtained an astonishing effect from it, though I did not promise or expect complete anæsthesia. The introduction of the speculum, the seizing of the conjunctiva with the forceps, and its dissection from around the cornea seemed to cause the patient *no pain;* but the section of the external muscles and the division of the nerves back of the eye were evidently attended by severe pain, although the cocaine solution was several times dropped into the eye during the performance of the operation, and was gotten, to some extent, under the conjunctiva. Whether under such circumstances a stronger solution would produce a more satisfactory degree of anæsthesia is a question which, doubtless, will soon be determined. Probably it will not be practicable to obviate entirely the pain attending section of the ciliary nerves behind the ball; but by waiting for the bleeding to cease after dissecting up the conjunctiva, injecting the cocaine into the sub-conjunctival tissues; and waiting again a sufficient time for it to produce its anæsthetic influence there, it will doubtless be possible to cut through the muscular attachments of the eye without pain, and to complete the enucleation with but a trifling amount of suffering.

That in the treatment of inflammations of the eye, more especially of corneal affections, the cocaine will prove a most valuable agent, seems altogether probable, in view of the marked influence which it has been found to exert in controlling photophobia and ciliary irritation. I have already employed it in a case of extreme photophobia, blepharo-spasm and lachrymation—attending a relapse of granular conjunctivitis—with apparently marked benefit, the symptoms of ciliary irritation having almost entirely disappeared after ten days' use of the drug, a two per cent. solution having been applied to the eye four times a day. It should be stated, however, that in addition to the cocaine installations, a daily application of sulphate of copper was made.

Whatever cocaine may accomplish in other departments of surgery, the discovery of its anæsthetic influence upon the eye marks an era in the development of ophthalmology. It is an event the importance of which we can, as yet, scarcely appreciate. *Maryland Med. Gazette.*

NOTES ON THE USE OF HAMAMELIS IN THE TREATMENT OF VARICOSE VEINS.

Some time ago Dr. J. H. Musser called the attention of the profession to the use of hamamelis in the treatment of varicosed veins and their sequences. Since then numerous inquiries have been made of him concerning this drug, and several cases have been reported to him of its use. It has therefore been deemed advisable to again refer to this plan of treatment. In the first place, to determine this question it is important to know whether the beneficial results of the treatment of the cases previously reported were permanent or not.

The three cases noted in full in this paper have been under my observation ever since that time. The first two may be dismissed at once by saying neither of the patients has had any return of the varicose veins or of any symptoms of them. Regarding the third, who was to be present to-night, it will be remembered that, on account of the severity of his symptoms, he was unable to work for nine months prior to having taken the medicine, and for three months of that time he was treated in a hospital by rest, pressure, etc. He returned to work two months after, beginning the hamamelis, and has continued at his laborious occupation ever since. In answer to a summons he presented himself two weeks ago. He had not taken any medicine for ten months. There was no return of any one symptom of his disease, save the varicosity noted below and slight œdema of the left leg. The tissues, however, readily take on ulcerative action, for every time a stone fell against his leg an ulcer formed, with this difference from formerly, that it healed rapidly. On examina-

tion, two inches below the knee, on the inner aspect of the leg, a congeries of veins is found. They are not painful, returned during the past month, and have given him no trouble. The œdema of the ankle is not marked. There is a small healing ulcer on the right leg which was caused by a stone falling on the leg a month ago. Both extremities are very cold, on account of which he wears heavy stockings, and woolen material—articles that were unbearable one year ago. When the past sufferings of this man are compared with the comfort and usefulness of the past year, in view of the previous systematic treatment of him, it can scarcely be gainsayed that hamamelis is of value in varicose disease.

The subsequent experience of the writer has not been a large one, and only two patients can be referred to positively. But, in order not to present the facts alone of a probably prepossessed observer, the statements of numerous gentlemen will be given who have made use of the drug since the article referred to was published. It is, no doubt, natural that only the favorable cases have been reported to the writer—failures not being considered worthy of notice. There are some unfavorable comments given, however, and they will be first noticed.

Thus Dr. Dulles, surgeon to the dispensary of the University Hospital, writes as follows: "I tried it in a number of cases of leg-ulcer in the dispensary, and finally abandoned its use, because I came to the conclusion that it was only of moderate value, and could in no sense be looked upon as a substitute for the ordinary surgical methods of treating these ulcers."

Rather more favorable is the testimony of Dr. Stelwagon, chief of the Skin Dispensary of the same hospital. He says: "The remedy was made use of in about fifteen cases—in patients with eczema, ulcers, or both, in whom the veins were at all enlarged. In three instances the results seemed, both to the patients and myself, favorable. In four or five cases the patients thought some benefit had ensued; I could not convince myself that such was really the fact. In the remaining cases no improvement followed its use." In all the cases the roller bandage was employed. Dr. Stelwagon says his experience is negatively favorable, and the remedy is worthy of more extended trial. Of the six cases treated by Dr. Van Harlingen, professor of skin diseases at the Polyclinic, there was one quite successful case; two patients improved very much; the remainder made but two or three visits to the dispensary.

Still more favorable is the testimony to follow. Dr. R. M. Girvin reports two cases cured—no failures. One was that of a female with varicosity of the deep veins of both legs, with swelling and induration of the limb and spots of ulceration as large as a dime. The veins were enlarged and tender; the pain was intolerable. One teaspoonful of the fluid extract of hamamelis every four hours was ordered, and improvement was seen in three days; a cure in two weeks. No other treatment was used, and the patient was on her feet most of the time during the treatment.

Dr. Shelly, of Ambler, Pa., reports the following:

"Female, aged forty-five, cook, varicose veins in both lower extremities of fifteen years' duration, unhealthy ulcer on outer aspect of left ankle joint of ten years' duration. Ulcer followed a hæmorrhage, and never healed. Both legs œdematous, the left much indurated. Eczema around the ulcer. Pains so great she has been confined to her chair or bed for one month. Treatment: Hot bran baths and thin adhesive strips to her left limb only; hamamelis in teaspoonful doses five times daily. Relief almost marvelous, being about the house in one week, and three months afterware the knotted and distorted veins had entirely disappeared, notwithstanding the continuance of her laborious duties. The rubber stocking which she had used for years was discarded, and its use has not been resorted to."

To further illustrate the affinity this drug has for venous structures Dr. W. E. Hughes writes that a case of phlebitis, secondary to chronic Bright's disease, was entirely and rapidly relieved by the use of this drug.

These reports ought to be of some avail to convince the most captious. It is thus seen that positive and negative results are given. The accuracy of observation cannot be doubted, and hence conclusion can only be vitiated by two factors, the preparation used and the dose exhibited. It is difficult to make a numerical statement, and so it can only be said that this drug is a decided value in a certain proportion of cases of varicose disease. If an estimate were to be made of the proportion of cures and failures, without fear or exaggerating, it may be said that one-fifth of all cases are cured, and that one-third of the remainder are benefited.

THE VILLAGE DOCTOR.

How he makes it easy to die—the contrast between the busy city physician and the quiet country practitioner.

It may be that your finely educated and well informed city physicians know better what a sick man needs, but they do not begin to know as well as the old Oxford doctor what that sick man wishes. It may be that your beloved and well-brushed M. D. cures more diseases, but he has never learned how to make his patient forget the disease he cannot cure. Your city physician is a business man. He is always in a hurry. He yanks your door bell, startling you from a refreshing nap. He brushes by the servant who opens

the door to him, and comes into your bed-chamber with the air of a Constable whose duty it is to throw you and your family out into the street—a Constable who enjoys doing his duty because "business is business." He strides to your bedside and jerks your hand from under the coverings, as if it held something that had been stolen from him. You are afraid of him, and wish he would get through and go away. He orders you to put out your tongue much as a prosecuting attorney would if he expected to find some evidence of crime upon it. He flips out a massive gold watch that marks the quarter-seconds, counts your pulse, says you are a very sick man, and coldly tells you that if you have any business matters to settle you would better be about them. He orders your terrified wife to bring a spoon and a glass of water while he is directing a Latin prescription to his friend the druggist, who charges him no profit on personal purchases. He doesn't want the spoon and water; he only wishes to order somebody to do something, and these are the first things he thinks of. When he goes away as abruptly as he came you turn your face to the wall and think what a very great doctor this very great doctor must be, and you resolve to get well in order to get rid of him; and you do get well, either because you can't help it or because you can't afford to be sick any longer.

If you want a physician to cure your ills, the city M. D. will do. But if you want somebody whose warm sympathy will make you forget that you are sick, come here and try the old village doctor. He never rings a bell. Why should he, since he knows every nook and corner in every house in the village? He is, so to speak, a member of every family in Oxford, and a most heartily welcome member, too. With his little medicine case, containing a few staple drugs, not forgetting plenty of calomel and the necessary instruments for cupping, he enters at the back door as gently as the perfumed breath of a bright May morning. The figure may not be just the thing, for the doctor grooms his own horse, and his perfume is of the stable; yet there is something kind and sympathetic in his manner that seems to smell sweet to the soul. After his brief chat with the house-wife in the kitchen, he finds his own way to the little front bedroom, the wife following, wiping her hands and bare arms on the wrong side of her long calico apron. If his patient be asleep he stealthily tip-toes back to the kitchen and says he will wait. Seated on the door-step just outside the open door, he whittles, and talks in low tones with the wife as she goes on washing the breakfast dishes. Piece by piece he learns every symptom, every little particular of his patient's last night; and then, when the conversation ceases and the wife goes quietly up the narrow back stairs to make the children's little bed, the old doctor sits and peels long curly shavings off the yellow pine stick, softly hums a good old Methodist hymn, and thinks and thinks what he should do next for his sick man. Half the forenoon is gone when the good wife comes to the door and says, in same old subdued tone to which she has habituated herself: "Doctor, he is awake now." The old doctor slowly lifts himself, unkinks his stiffened joints, kicks his legs out to straighten down his trousers, shuts his big bone-handled knife, brushes the shavings from his shiny clothes, and goes to the bedroom. The sick man slowly turns his head toward the door way, smiles sadly, puts out his long, white, bony hand to him and whispers hoarsely: "Well Doctor?" which is a sick man's favorite form of asking how his doctor thinks he is getting along. The old doctor raises the blue paper curtain and slowly draws a chair close to the bed. "Oh, you're looking ever so much better to-day. We'll have you out hoeing potatoes in a day or two." The old doctor knows this is false: knows that no human power can prolong the man's life a month, but he is one of these great good men who live above the necessity of telling the truth on all occasions. Only the puny-souled creatures who have to keep themselves in straight-jackets lest they do something wicked, need to live within the narrow limits of an inviolable rule always to tell the truth. "You're getting on nicely. Don't you see you've got more color in your hands? And your eye looks brighter than it has for a month. A very sick man couldn't sleep as you did this morning. Why, I've been here two hours, and you've been sound asleep and snoring every minute o' the time, ain't he, Mrs. Sanford?" The poor wife is almost afraid the doctor exaggerates, but there is something so wholesome in the old doctor's manner and so encouraging in his words that she quite forgets her troubles, and becomes even chirper in her efforts to assure her husband that the doctor is right. While the little woman moves softly about, gently dusting this and that piece of furniture, turning the shutters so that the sunbeams creeping toward the bed may not climb up and get into the eyes of the sick man, the old doctor urges on the conversation, adroitly turning the subject from sickness and trouble, and even from health and prosperity, with which the sick man might make painful comparisons. Soon the room is changed from a chamber of death and despair to a panorama of scenes pictured by the doctor in his relation of his recollections and experiences. The sick man turns his head to catch every word. He is an interested listener, while the old doctor sits there and relates as actual personal history a hundred and one things that never happened to any body. Why should he stop to ask himself whether truth is mighty so long as he can see that falsehood is prevailing over his patient's despair, and causing him to forget whether he is sick or well?

A writhing of the sick man's face and the placing of his thin, clammy hand upon the breast tells of a sharp pain. Quick, the opiate! There,

he sleeps! Now all is well. Ah, yes, he sleeps. He will not wake again. Death came to him as in a pleasant dream. He knew it not, and hence he died but once. Kind-hearted, warm old doctor! Dear old coward, w'.o never fights disease, but surrenders at its first approach, and labors lovingly to smooth the way to death! Blessed old bungler, who gives no dying man the warning that would turn his latest hours to business cares and save his heirs a world of worriment and loss! Who does not love this Oxford doctor.—*Chicago News.*

THE TREATMENT OF PELVIC CELLULITIS FOLLOWING PARTURITION.

Dr. W. M. Graily Hewitt thus concludes an article in the *Med. Press.*

A few words with respect to the treatment: A remarkable feature in these cases is their tendency to chronicity. They are always tedious and difficult to cure, and the cure depends more on attention to diet than on any other element of the treatment. Rest, of course, is an essential; but the nutrition requires careful consideration. With regard to the subject of food: Deficiency of food may predispose to cellulitis in a patient in whom other factors in its cause may be present; or it may render an already-existing case of cellulitis less amenable to treatment. In the case before us the quantity of food taken was perhaps only one-third of the total amount required by the healthy subject. This created a weakness which showed itself in various ways. Under these circumstances there is great indisposition to take food, and if only three stated meals a day are provided, a very small amount is taken; the patient becomes exhausted in the intervals, and when meal-time comes is not able to take nourishment. Hence the quantity taken is not enough to induce activity in the nutrition process, but only enough to keep up a condition of *statu quo.* To stimulate nutrition, articles capable of ready assimilation must be selected—Brand's essence, beef tea, milk, etc., with a fair amount of stimulant in the shape of brandy, and this must be given very frequently, every hour or so. Under this treatment the appetite will rapidly improve, and in a week or so, in all probability, solid food will be taken with zest.

As subsidiary treatment, poultices may be applied to the abdomen to relive pain and assist resolution, and if the latter is very severe a little opium is indicated. The bowels should be daily opened by the administration of a mild laxative. Some medicine, in the shape of dilute nitro muriatic acid with a little tincture of orange, is often useful as a stomachic and tonic; and later on iron and quinine may be given with advantage.

THE TREATMENT OF PHTHISICAL NIGHT-SWEATS.

Many drugs have been recommended for this weakening accompaniment of phthisis, but comparatively few have given satisfaction. With the view of discovering some drug that would control the sweating, and at the same time that would be free from drawbacks, Dr. C. M. Cauldwell instituted a series of observations on a large number of cases. As a result he reports, in the *N. Y. Med. Jour.*, September 27, 1884, that picrotoxin recommended by Dr. Ringer and Dr. Murrel, more nearly approached the ideal in view than any of the other drugs. It was prescribed for twenty consumptives suffering from profuse night-sweats. In seventeen of the cases the perspirations were entirely checked, or so far diminished as to produce no further debility or annoyance. Even when given in much larger doses than are ordinarily prescribed, it caused no disturbance of the nervous system or of the gastro- intestinal tract—in fact, produced no evil effect whatever. In this respect it compared very favorably with atropine, ergotin, etc. A single full dose of the drug at bed-time was generally sufficient to control the sweating for twenty-four hours.

Where one dose failed, a second was taken shortly after midnight.

The initial dose, mentioned by Ringer and the English writers generally, is the one hundred and fiftieth of a grain. This was found much too small, and was accordingly increased to one-fortieth of a grain.—*Phil. Med. Reporter.*

MORE ABOUT BOILS.

In the *Reporter* of Sepember 5, Dr. G. W. Barr, writing about boils, says: "All attempts to abort or prevent a succession of boils are unsatis factory."

Now, in reality, their abortion is easy and simple, if treated before there is any really dead tissue to slough out. My own plan is to cover thickly with absorbent cotton and keep it constantly saturated with spirits of turpentine. This will also always abort a felon, if used *early.* Now, to prevent their succession. Put a handful of bird-shot in a pint of sweet milk; boil it twenty or thirty minutes and take it for supper. Repeat this for three nights, then omit for three nights, and repeat. Then, if a tonic is needed, take ten to fifteen drops of elixir of vitriol three times a day, following each dose with two or three grains of quinine sulph. If Dr. B. will follow the above hints I am sure he will not prefix *un* to *satisfactory.* In place of vaseline I would advise him to use a paste of *resin soap, yolk of egg, brown sugar,* and *sweet oil.* Now, doctor, if you really feel that your reputation as a surgeon requires you to incise a boil *early,* select your *enemies,* incise freely, and fill the incision with carbolic acid or creasote, and cover with a poultice. For your friends, use the paste and wait till the boil is ripe.

CANNABIS INDICA IN MELANCHOLIA AND MENTAL DEPRESSION WITH SLEEPLESSNESS.

Dr. Wm. Strange, of Worcester, Eng. (*British Medical Journal*), has observed beneficial results from the use of cannabis in cases of melancholia and mental depression attended with sleeplessness. The usual dose he thinks is too small; at least a grain of the extract or twenty to thirty minims of the tincture should be prescribed ordinarily. This amount, combined with half a drachm or a drachm of bromide of potassium, rarely fails to give relief. It dulls the anxiety, lessens the depression, and gives restfulness if not sleep. If there be visceral disturbance, hyoscyamus acts well with the cannabis.—*N. Y. Med. Jour.*

THE CANADA MEDICAL RECORD

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EDITORS:

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R. A. KENNEDY, M.A., M.D.

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THE LYNAM CASE.

Since our last issue Dr. Vallée has made his official report, affirming Mrs. Lynam's partial insanity, and recommending her conditional release. She has been accordingly removed from the asylum by order of the Court, and consigned to the care of Mr. Alfred Perry, who has given the requisite security for her future good conduct. Thus ends for the present a *cause celebre*, which has stirred up public feeling to an unusual extent, and reflected little credit upon the Lunacy Regulations of this Province. Mrs. Lynam might have been discharged from the asylum long ago, trouble and expense spared, and sectional ill-feeling avoided, had the ordinary methods provided by law been adopted in her case. Dr. Perrault, the Asylum Physician, considered her sane from the time of her admission; had he, of his own accord or at the suggestion of Mr. Perry or any other friend of Mrs. Lynam, officially reported her fit for discharge, Dr. Howard would have liberated her at once, provided he agreed with Dr. Perrault; if he disagreed, he would have been bound by law to transmit Dr. Perrault's opinion along with his own to the Provincial Secretary, who would then have appointed a third expert to examine the patient and decide between the other two. Dr. Vallée, in all probability, would have been the expert selected; so that a fortnight could have accomplished precisely the same result as the three long months of legal wrangle. But then it is possible that the world in general, and Montreal in particular, might never have discovered the great philanthropic qualities of its "*Public Benefactor*," which no doubt would have been a *local*, perhaps a *national*, misfortune. But a still shorter and easier method was available; had Mr. Lynam been induced to made application to Dr. Howard for his wife's conditional release, she would have been allowed out on probation for one, two or three months; if at the end of that time no good reason existed to the contrary, she would have received her unconditional discharge. We are informed that, as a matter of fact, Dr. Howard proposed this method of procedure to Mr. Perry before legal proceedings were instituted. The direct appeal to the Court was never intended for general use, but was provided for those exceptional cases only in which the simpler methods had proved ineffectual. Mr. Perry's action in ignoring Government officers and ordinary methods of procedure and resorting to the cumbrous and expensive processes of the Courts was not only unnecessary but quite unwarrantable; while it is unquestionably true that an egg may be chipped with a huge steam-hammer, yet simpler methods are preferable when performing this common experiment.

Dr. Vallée's report is inaccurate, timid, hesitating and uncertain in its tone, and upon the whole decidedly unsatisfactory; it is not such a report as we would have expected from a man of his standing, and is hardly calculated to increase his reputation as an alienist. He states that there was no proof of hallucination; but if he had read the evidence carefully, he would have found clear proof of delusions concerning food, and concern-

ing voices "*many times*" heard speaking outside the window at night. He sees nothing strange in the fact that it has been found necessary to confine Mrs. Lynam in the refractory ward ever since her admission, and that, on the only occasion she seemed well enough to be transferred to the convalescent ward she behaved in such an unruly manner that she had to be removed to her old quarters within twenty-four hours. Nor does he find it extraordinary that she actually preferred living in the furious ward, because the cries and screams of the violent patients "*amused*" her and "*prevented her from feeling lonesome.*" The following extracts are interesting :

"I made her relate the circumstances of her incarceration, and she repeated to me all the details just as she had about given in court during her trial. Her husband had been jealous of her, and she on her side would have had reason to be jealous of him, but she had never complained of him, and in support of her statements on this point, she mentioned a number of facts and circumstances. This idea of jealousy appears fixed. She recurred to the subject quite willingly..... Whenever her husband was spoken of she became more or less excited and made statements at least *bizarres*. I expressed to her my surprise that the sight of her husband should have carried her to the point of insulting and cursing him. She replied to me that every morning and every night she cursed him. I said to her: "If you are liberated would you return to him or would you endeavor to meet him?" "No," she replied, "as long as I live I never wish to see him, but after my death I will visit him, in order to have my revenge on him;" and as I manifested some doubt on this subject, she added, with a sigh of strange conviction, "I know that I will return to satisfy my vengeance." In one of my later visits I announced to her that her husband was very sick, and that he was probably dying. She said to me that she wished to see him dead, but that, nevertheless, she preferred to die before him in order to come back and worry him. She admitted to me that her children had only their father to sustain them, and that his death would throw them into the street. Nevertheless, so hardly did she feel towards her husband that even this consideration did not interfere with her express desire to visit him after death. There is in this avowal an aberration of sentiment which is hardly explicable in a mother who loves her children as she pretends sometimes to loves them.....The following was established at the judicial enquiry: In the month of March, 1882, the husband of Rose Church went to her lawyer to consult him on the subject of a demand for *separation de corps*. He complained that the woman refused to look after his household, to take care of his children; that she was passionate and violent; that she tried to strike him with an axe; that she threatened to make a hole in the ice and drown her children. It was on this occasion that Dr. Howard went to her house and saw the woman for the first time. He found her in a veritable state of maniacal exultation, her hair and clothes disordered, the room turned upside down, the furniture thrown upon the bed, the children frightened and gathered up in a corner, afraid of the approach of their mother. The details of this striking picture are confirmed by Mr. Curran who accompanied Dr. Howard, and by the information which I obtained from the children. Now, if we attempt to ascertain the cause which has brought about this result it is difficult to reconcile a like scene with perfect soundness of reason. Still the impulsive movements are sufficiently frequent with Rose Church, and are provoked by the most insignificant causes. Thus her two little children told me that they had an instinctive fear of their mother, and that her laughter, even her caresses, did not reassure them, because there frequently came upon her a sudden transition without motive from a certain gaiety of humor to explosions of inexplicable anger. Do these passions at the mere sight of her husband offer or present the character of a simple outburst of passion? As they were seen by Drs. Ross and Cameron, who were witnesses, it is not very reasonable to impute them, in view of their great violence and instantaneous outbreak, to the influence of disease rather than to the calculations of the will. On the other hand, it is admitted that this woman is absolutely temperate and regular in her moral conduct. How, then, are we to explain her indifference to her duties. Her husband reproaches her for not working, for neglecting her house, and for not caring for her children. These facts have been confirmed by the little girls, and also implicitly by the woman herself, who admitted to me on different occasions that she spent a part of her day in sleeping. It often happened that she did not prepare any meals for the family, and then the father would go to his work

and the children to school without any food..... Is that woman insane or not?.....She does not present the signs of one of those ostensible insanities which accuse themselves by a great extravagance of conduct. On the other side, if I analyze the information that I have received by the trial, by my interviews, and by the other information obtained, I come to the conclusion that Rose Church is not abolutely sane. In all her faculties the extreme mobility of her impressions reflect the suddenness of her passions; the obliteration of her maternal sentiments shows that in that woman the affective faculties are evidently perverted on her husband's and her children's account.....I believe that it would not be prudent to force her husband to receive her, but I do not see any reason why she should not be liberated and placed in the care of any other person who wishes to take charge of her."

Dr. Perrault, the asylum physician,figures very badly in this case. In his evidence before the Court he swore that he never considered Mrs. Lynam insane: Nevertheless, upon two separate occasions he entered her name in the books as suffering from *erotomania*, and he never considered it his duty to report her officially to Dr. Howard for discharge.

Dr. Henry Howard, the Government Visiting Physician, has throughout this case been subjected to constant abuse and misrepresentation, which, being wholly unmerited, must have been very galling.. We congratulate him upon the issue of the case; he has not only been personally exonerated, but his views have been in a large measure sustained, Mrs. Lynam being released conditionally as he had previously suggested.

The contradictory nature of the Medical evidence, and the somewhat unsatisfactory result of the trial, are, as usual, largely due to the absurd method of taking expert testimony in vogue in this province. Is it not high time for our legal brethren to revise their methods, and learn somewhat from the more rational procedure of France and Germany? Reform is urgently needed in many directions, and we sincerely trust that the strong public feeling, to which Mrs. Lynam's release is largely due, will not be allowed to die out till it has secured the thorough revision of the lunacy laws of this Province. If this good result can only be achieved the time and money expended upon Mrs. Lynam will not have been in vain.

AS OTHERS SEE US.

Mr. Lawson Tait, F.R.C.S.E., of Birmingham, whose visit to and address before, the Canada Medical Association at its meeting in Montreal in August last, will be remembered by many of our readers, has been enlightening his brethren at home in regard to what he saw on this side of the Atlantic. On the 31st of October last he read a paper, entitled "American Notes" before the Birmingham Medical Society. In the course of the paper he says:—

"From Boston I passed on to Montreal, where began the series of my engagements for the fulfilment of which my transatlantic visit had been arranged. The beauty of this city has been so often praised that it is useless for me to repeat the platitudes of my own impressions further than this, that in my memory there dwell above all others in prominence the recollections of three landscape views that I have ever seen; from the terrace at Malvern, from Arthur's Seat at Edinburgh, from the castle at Heidelberg, and last, but not least, from the hill at Montreal, from which extends a view all round and not surpassed by anything I ever saw. In Montreal I was the guest of Dr. Gardner, Professor of Gynecology in McGill University, and it was my privilege to give an address to the Canada Medical Association, the annual meeting of which had been arranged to take place during the three days just preceding the meeting of the British Association. My business here, of course, is chiefly with what I saw and not with what I said; but I wish again, here in my own land, to repeat my acknowledgments of the brilliant reception given to me by my Canadian brethren, not so much on my own account as for the position in which they placed me, that of a representative for the time being of British surgery.

During those three days I was associated with some three hundred practitioners of medicine. I heard a number of papers read, with discussions upon them, and I say, without hesitation, that nothing which was said or done at that meeting but would have reflected credit on any medical gathering in the world. I often hear it said by practitioners in this country, whose lots are cast in places remote from the busy centres of life, that they find it difficult, or even impossible, to attend meetings of professional societies, and to keep themselves abreast with the growth of the science of medicine and surgery; but in that new country

and at that Congress I found men eager and able to be present, though they had thousands, instead of scores, of miles to travel, and it was to me quite impossible to realize the fact that men who sat next me, and who talked fluently and well of the most recent advances in pathology, who knew all the dodges and newest things in laryngology, etiology, and gynecology, practised in villages four, five, or even six days' travel from the place of meeting; that many of them existed in places still unmarked on the map, without any professional neighbor nearer than perhaps a hundred miles. Some of them were even professors in flourishing medical colleges, placed in large cities, which ten or twelve years ago had no existence. In the style, character, and conversation of these men, not only could nothing be detected which could mark them as being defective in general or professional culture and education, or which could place them in a rank lower than the practitioners of my own country, but I doubt very much if, from the highest to the lowest in our own ranks we were to take 250 or 300 of our men at random we could compare favorably with them.

Another source of surprise was the large number of medical schools. Thus, in Montreal, a city of 140,000 inhabitants, there are no less than four of these schools—two Catholic and two Protestant—and, although there is only one of great importance, still all of them are well-officered and well-appointed, and, from what I could see of the results of their training I am unable to say that any of them can be charged with inefficiency. In Toronto there is a magnificent university, the president of which is the famous archæologist, Daniel Wilson, and two medical schools, the buildings of both of which I inspected with care, and I venture to say that they compare very favorably with the school in our own town, or indeed with any provincial medical school, as well as with a large number of our metropolitan schools. The tendency toward the downward competition which would otherwise be inevitable in medical education is prevented by the establishment of that which we most of all want in this country—a guarantee on the part of the State of a minimum amount of medical education.

Of the hospitals of Canada I can say nothing but what is favorable. Dr. Hingston, the distinguished surgeon of l'Hotel Dieu, and others, took great trouble to show me all their details. Their appointments are equal in every respect, and in some respects are far superior to those to be seen in any but the newest hospitals in this country. I spent a long afternoon in the hospital at Toronto, and I saw there the results of surgical work as brilliant as any to be found in Great Britain."

COMMITTEE ON ORGANIZATION OF THE NINTH INTERNATIONAL MEDICAL CONGRESS, TO BE HELD IN WASHINGTON, D.C., IN 1887.

PRELIMINARY NOTICE.

The Committee on Organization of the Ninth International Medical Congress, to be held in the United States in 1887, met in Washington, D. C., on November 29, 1884, for the determination of the general plan of the Congress, the election of Officers of the Committee, who will be nominated to fill the same offices in the Congress, and the consideration of questions of finance.

The following rules were adopted:

1. The Congress will be composed of members of the regular medical profession who shall have inscribed their names on the Register of the Congress, and shall have taken out their tickets of admission. As regards foreign members, the above conditions are the only ones which it seems, at present, expedient to impose.

The American members of the Congress shall be appointed by the American Medical Association by regularly organized State and local medical societies, and also by such general organizations, relating to special departments and purposes, as the American Academy of Medicine, the American Surgical Association, the American Gynæcological, Ophthalmological, Otological, Laryngological, Neurological, and Dermatological Societies, and the American Public Health Association, each of the foregoing Societies being entitled to appoint one delegate for every ten of their membership.

The members of all special and subordinate Committees, appointed by the General Committee, shall also be entitled to membership in the Congress, together with such other persons as may be specially designated by the Executive Committee.

All Societies entitled to regresentation are requested to elect their Delegates at their last regular meeting preceding the meeting of the Congress, and to furnish the Secretary-General with a certified list of the Delegates so appointed.

2. The work of the Congress is divided into eighteen Sections, as follows, viz:

1. Medical Education, Legislation and Registration, including methods of teaching and buildings, apparatus, &c., connected therewith.

2. Anatomy.
3. Physiology.
4. Pathology.
5. Medicine.
6. Surgery.
7. Obstetrics.
8. Gynæcology.
9. Ophthalmology.
10. Otology.
11. Dermatology and Syphilis.
12. Nervous diseases and Psychiatry.
13. Laryngology.
14. Public and International Hygiene.
15. Collective Investigation, Nomenclature, and Vital Statistics.
16. Military and Naval Surgery and Medicine.
17. Experimental Therapeutics and Pharmacology.
18. Diseases of Children.

3. The General Meetings will be reserved for the transaction of the general business of the Congress and for addresses or communications of scientific interest more general than those given in the Sections.

4. Questions which have been agreed upon for discussion in the Sections shall be introduced by members previously nominated by the Officers of the Section. The members who open discussions shall present a statement of the conclusions which they have formed as a basis for debate.

5. Notices of papers to be read in any one of the Sections, together with abstracts of the same, must be sent to the Secretary of that Section before April 30, 1887. These abstracts will be regarded as strictly confidential communications, and will not be published until the meeting of the Congress. Papers relating to questions not included in the list of subjects suggested by the officers of the various Sections will be received. Any member, after April 30, wishing to bring forward a subject not upon the programme, must give notice of his intention to the Secretary-General at least twenty-one days before the opening of the Congress. The Officers of each Section shall decide as to the acceptance of any communication offered to their Section, and shall fix the time of its presentation. No communication will be received which has been already published, or read before a Society.

6. All addresses and papers, read either at General Meetings or in the Sections, are to be immediately handed to the Secretaries. The Executive Committee, after the conclusion of the Congress, shall proceed with the publication of the Transactions, and shall have full power to decide which papers shall be published, and whether in whole or in part.

7. The official languages are English, French, and German.

No speaker shall be allowed more than ten minutes, with the exception of readers of papers and those who introduce debates, who may occupy twenty minutes.

8. The Rules, Programmes, and Abstracts of Papers will be published in English, French, and German.

Each paper or address will appear in the Transactions in the language in which it was delivered by the Author. The debates will be printed in English.

9. The Officers of the General Committee on Organization are a President, three (3) Vice-Presidents, a Secretary-General, and a Treasurer, and those elected to these positions will be nominated by the General Committee to hold the same offices in the Congress. All vacancies in these offices shall be filled by election.

10. There shall be an Executive Committee, to be composed of the President, Secretary-General the Treasurer of the General Committee, and of four other members, to be elected by the General Committee. The duties of the Executive Committee shall be to carry out the directions of the General Committee; to authorize such expend i tures as may be necessary, and to act for the General Committee during the intervals of its sessions, reporting such action at the next meeting of the General Committee.

11. There shall be a Standing Committee on Finance, composed of five members, to be appointed by the President, subject to the approval of the Executive Committee.

12. Those who are elected as Chairmen of the several Sections shall be thereby constituted members of the General Committee.

The Officers elected are as follows:

President.—Dr. Austin Flint, Sr., of New York.

Vice-Presidents.—Dr. Alfred Stille, of Philadelphia; Dr. Henry I. Bowditch, of Boston; Dr. R. P. Howard, of Montreal, Canada.

Secretary-General.—Dr. J. S. Billings, U. S. Army,

Treasurer.—Dr. J. M. Browne, U. S. Navy.

Members of the Executive Committee (in addition to the President, Secretary-General and Treasurer.)—Dr. I. Minis Hays, of Philadelphia; Dr. A. Jacobi, of New York; Dr. Christopher Johnston, of Baltimore; Dr. S. C. Busey, of Washington.

The Executive Committee will proceed at once to complete the work of organization.

J. S. BILLINGS,
Secretary-General.

WASHINGTON, D.C., Dec. 1, 1884.

COLLEGE OF PHYSICIANS AND SURGEONS.

PROVINCE OF QUEBEC.

Mr. de Lamirande, the detective officer of the College, furnishes us with the following result of actions against unlicensed practitioners, rendered since September last.

—College *vs* Théodore D. Whitcher, Beebe Plain, two cases, in which defendant confessed judgment, paid fines and costs.

—College *vs* Gabriel Courchêne, bone-setter of La Baie du Febvre. Two cases were taken against him, he has contested both cases, and he was condemned to pay fines and costs in both cases.

—College *vs* Eugène Ratelle, barber, of Montreal. He contested, and was condemned to pay fine and costs.

—He also states that Dr. John Burke, of Stanstead, has left the Province of Quebec not being able to qualify, and being threatened with prosecution.

THE MEDICAL RECORD VISITING LIST.

This Visiting List, published by Wm. Wood & Son, of New York, proprietors of the New York *Medical Record*, has been received. It is really a very elegant memorandum book, and embraces everything required in a Visiting List. We look upon the flexible character of the cover as being a feature which will commend it to many.

PERSONAL.

Dr. J. F. T. Jenkins has settled in Riverside, Southern California. His residence in Richmond square, Montreal, has been taken by Dr. Airth.

It is rumored that one of the candidates for the vacant position in the City Council representation of St. Ann's ward will be Dr. Kannon of Notre Dame St.

REVIEWS.

"*Edmond Dantes*," the Sequel to Alexander Dumas' great novel, "The Count of Monte-Cristo," is one of the most wonderful romances ever written, and an entire new and enlarged edition of it is in press, and will be published in a few days by T. B. PETERSON & BROTHERS, Philadelphia. Just at the point where "The Count of Monte-Cristo" ends, "Edmond Dantes" takes up the fascinating narrative, and continues it with marvelous power and absorbing interest unto the end. Besides the hero, Haydee, Mercedes, Valentine de Villefort, Eugenie Danglars, Louise d'Armilly, Zuleika (Dantes' daughter), Benedetto, Lucien Debray, Albert de Morcerf, Beauchamp, Chateau-Renaud, Ali, Maximilian Morell, Giovanni Massetti, and Esperance (Dantes' son) figure prominently, while Lamartine, Ledru Rollin, Louis Blanc and hosts of other revolutionary leaders are also introduced. "EDMOND DANTES" will delight all who read it.

Sexual Neurasthenia (Nervous Exhaustion) its Hygiene, Causes, Symptoms and Treatment, with a Chapter on Diet for the Nervous. By GEORGE M. BEARD, A.M., M.D. (Posthumous Manuscript.) Edited by A. D. Rockwell, A.M., M.D. New York: E. B. Treat, M.D., 1884. Price $2.

The late Dr. Beard was a prolific writer, who had the courage of his convictions, and therefore never hesitated to give expression to them, either through the press or, when opportunity offered, *viva voce*. He was generally believed by many in the profession to be extreme in some of his views, but his honesty was never doubted. His treatment of the special class of cases on which this book is written was often heroic and much criticised. It may, however, in the near future prove not to have been more heroic than was necessary. It is generally admitted that the late Dr. Beard, and the editor of this work, who was also his fellow-worker and colleague, were the first to enunciate the idea that electricity was a

powerful constitutional tonic, as well as a stimulator and excitor of paralysed muscles. The work is written in a bold and flowing style, and breathes throughout a spirit of purity which makes it pleasant reading. Cases of sexual exhaustion deserve far more consideration at the hands of the profession than they are in the habit of receiving. If this attention was given to them they would not fall in such numbers into the hands of the Quack, who reaps from them a rich harvest of fees. This book is calculated to awaken in the mind of the thoughtful reader a deep interest in the unfortunate victims of "Neurasthenia." If Dr. Beard had written nothing but this work, he would not, we believe, have lived his short life in vain.

Bacteria and the Germ Theory of Disease. By Dr. H. GRADLE, Professor of Physiology, Chicago Medical College. Chicago: W. T. Keener, 96 Washington street.

This book contains eight lectures delivered at the Chicago Medical College, and they give a really very excellent resume of the whole subject.

A Practical Treatise on Surgical Diagnosis Designed as a Manual for Practitioners and Students in Medicine. By AMBROSE L. RANNEY, A.M., M.D., Professor of Practical Anatomy in the New York Postgraduate Medical School. Third edition, thoroughly revised, enlarged and profusely illustrated. New York: William Wood & Co., 1884.

This, the third edition, is very much increased in size over previous editions. This is due to the addition of two chapters on diseases of the brain and spinal cord and their envelopes, which certainly help to enhance the value of an already very valuable book. Quite a number of new illustrations have been added, some of them original, but the majority taken from well known surgical works. Dr. Ranney's work is recognized as a text book in many medical schools. It deserves to occupy a similar position in all of them. It is a work which should be found on the shelf of every surgeon and general practitioner.

A Manual of Bandaging Adapted for Self-instruction. By C. HENRI LEONARD, A.M., M.D. With one hundred and thirty-nine engraving—Second edition revised and enlarged. Detroit: Published by the Illustrated Medical Journal Company. Price $1.50.

This little work, of about one hundred and sixty pages, is eminently practical in its character. There does not seem to be a superfluous word in all its pages, and the various descriptions are given with much clearness and distinctness. The illustrations are admirable, and of course assist materially in fully comprehending some of the uncommon and rarely-used forms of bandaging. A chapter which will be read with profit is the one on the preparations of the various forms of poultice—while the chapter on strapping gives much valuable information. All these subjects are of course taught in Medical Schools, and practically illustrated by Clinical Professors, but little about them is to be found in systematic treatises, and even in works on minor surgery they are treated with much briefness. This book, it seems to us, supplies a want in our Surgical literature, and we therefore commend it to the attention of our readers.

A Text Book of Practical Medicine, designed for the use of Students and Practitioners of Medicine. By ALFRED LOOMIS, M.D., LL.D., Professor of Pathology and Practical Medicine in the Medical Department of the University of New York, Physician to Bellevue Hospital. With two hundred and eleven illustrations. New York: Wm. Wood & Co.

Dr. Loomis is known to the profession principally by his admirable work on Physical Diagnosis and numerous contributions to the Medical Press of New York city. The latter have found him an admirable observer of the practical points in the history of Disease. A systematic work on the Practice of Medicine from the pen of such a man naturally receives, or should receive, a hearty welcome at the hands of his professional brethren; and that this work will receive such a reception we have not a shadow of doubt. It is elaborate, and yet, withal, concise, and the style is pleasant, if such a term may be used in speaking of a work which deals with the various medical diseases to which the human family is subject. The volume consists of eleven hundred pages, and is divided into six sections as follows: Sect. i. Diseases of the Respiratory Organs. Sect. ii. Diseases of the Digestive System, including those of the Liver, Spleen and Pancreas. Sect. iii. Diseases of the Heart, Blood-vessels and Kidneys. Sect. iv. Acute General Diseases (this includes Miasmatic Contagious Diseases, Acute Contagious Diseases, and Malarial

Diseases) Sect. v. Chronic General Diseases (General Diabetes, Anemia, Chlorosis, Scurvy, Purpura, Alcoholism, Syphilis, etc., etc.). Sect. vi. Diseases of the Nervous System, including Diseases of the Brain, Spinal Cord, and Functional Nervous Diseases. All these various sections are illustrated to a very large extent, and we have to confess that we do not place the same value on them which the author seems to do. Doubtless to those connected with hospitals in cities, where *post-mortems* are obtainable, the illustrations will prove very valuable, but the bulk of the profession cannot get post-mortems, and even if obtainable have not had that education which enables them to easily recognise obscure pathological conditions. To the bulk of the profession, therefore, most of these illustrations are not of any special value, while they increase the size of the book considerably. A work on Practical Medicine does not need illustrations to make it valuable, and Dr. Loomis' work has quite sufficient in its admirable arrangement and clear descriptions to commend it to the profession without the addition of the large number of wood-cuts scattered throughout it. We say this from a fair knowledge of the work, which has been in our hands for a couple of months. We have consulted it whenever we felt it to be our duty to consult a work on Medicine, and have always felt satisfied with the information we obtained. In matters of medical treatment works by American authors are especially valuable to all practitioners on this continent: there are now-a-days so many remedies which we might say are peculiar to this side of the ocean, and works by English authors do not, as a rule, mention them. To have one or more volume by American authors in our library is a matter of necessity. We are glad, therefore, to notice that Dr. Loomis fully gives *all* the treatment followed on this continent. To any one wishing to add a work on practice to those they already possess we can heartily recommend this volume It is printed with type which gives a very clean impression, and the entire get-up of the work is such as to do credit to its publishing house.

Woods Medical Library: A Manual of Diseases of the Throat and Nose. By MORELL MACKENZIE, M.D., London.

This is the August issue of the Library volume. The reputation of its author is such as to commend it for acceptance to the thousands who now have subscribed to this Library,

A Text Book of Pathological Anatomy and Pathogenesis. By ERNEST ZIEGLER, Professor of Pathological Anatomy in the University Tübingen.

This is the September issue of the Wood Library. It is an excellent treatise on its subject, and will be acceptable to many; is a little too heavy, we fancy, for the bulk of subscribers, who must be very busy country practitioners—something more practical, we fancy, would be more to their taste. Still we suppose it is hard to publish *practical* works every month in the year and keep it up for several years.

Auscultation, Percussion and Urinalysis: An Epitome of the Physical Signs of the Diseases of the Heart, Lung, Liver and Kidneys. Edited by C. HENRI LEONARD, M.A., M.D., Professor of the Medical and Surgical Diseases of Women and Clinical Gynæcology, Michigan College of Medicine. Fully illustrated; Cloth, 16mo, 166 pages, post-paid, $1.00. Detroit, Mich., 1884. The Illustrated Medical Journal Co., Publishers.

CONTENTS :—CHAP. I.—*Topography of the Chest*, Anterior and Posterior. CHAP. II.—*The Physical Diagnosis of Diseases of the Respiratory Organs.* CHAP. III.—*Diagnosis by Percussion;* Percussion in Health and Disease. CHAP. IV.—*Auscultation of the Chest*, in Health and Disease; also of Voice, Cough and different Rales. CHAP. V.—*On the Sputa*, Microscopical and Macroscopical, with a brief Histology of Lung Structure. CHAP. VI.—*Diseases of the Lungs;* their Pathology and means for Physical Diagnosis. CHAP. VII.—*On the Pulse*; its Rate, Rhythm and Sphygmography. CHAP. VIII.—*The Heart;* its Regional Anatomy, Area of Dullness on Percussion in Health and Disease. CHAP. IX.—*Auscultation of the Heart*; the different Cardiac Murmurs and their Indications of Disease. CHAP. X.—*Diseases of the Heart;* their Pathology and Physical Signs. CHAP. XI.—*The Liver;* its Regional Anatomy, Histology, and Physical Signs of the different Diseases. CHAP. XII.—*The Spleen;* its Regional Anatomy, Histology, and Physical Signs of Disease. CHAP. XIII.—*The Kidney;* its Regional Anatomy, Histology, Pathology and Symptoms of different Diseases. CHAP. XIV.—*Urinalysis, Chemical and Microscopical;* prepared specially for this work by WM. H. ROUSE, M.D., Ph. C. CHAP. XV.—*Bacteria, Bacilli, Micrococci, Vibriones, and Spirillæ;* their Growth, Microscopy, and Agents destructive to them,

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THE TREATMENT OF OPIUM ADDICTION.

By DR. J. B. MATTINSON, BROOKLYN, N.Y.

Read before the American Association for the cure of Inebriates, Oct. 22, 1884.

Several years have passed since the writer had the pleasure of reading before this society a paper on the subject of opium addiction.

During this time his professional attention has been largely, and, of late years, exclusively devoted to the study and treatment of this toxic neurosis, and, with increasing experience has come improved therapeutics, all of which warrant him in again inviting attention to a topic, that, though accorded but little thought by the profession at large, possesses a great and growing importance, the extent of which, perhaps, will be none the less appreciated, by the reflection that many of those who fall victims to its steady advances, are recruited from the ranks of our own confreres.

Opium addiction is a *disease*, a well-marked functional neurosis, and deserving recognition, as such, to a greater degree than it has hitherto received. In the vast majority of cases, the *vice* theory of its origin is incorrect, so that, with few exceptions, the term "opium habit," is a misnomer, implying as it wrongly does, an opiate using quite under individual control.

As elsewhere stated, "The Genesis of Opium Addiction," *Detroit Lancet*, Jan., 1884, two causative factors exist—necessity and desire, but the result, if the opiate be sufficiently long continued, is essentially the same—a condition of disease, as evidenced by various functional ills.

The central tracts involved are the cerebro-spinal and sympathetic systems. Deviations from health noted, are due to departure from the normal tone of one or both of these centres. Organic lesions are rare, possibly, some instances of renal or brain disease—the usual ultimate result being a state of marasmus, impaired nutrition and profound nerve depression, ending in death.

In the paper to which reference has been made, attention was invited to a new method of treatment, and as this is largely the same we now employ, some improved changes will be noted in passing. We re-assert that it is based on the power of certain remedial resources to control abnormal reflex sensibility, and accomplishes, largely, two cardinal objects, minimum duration of treatment and maximum freedom from pain.

It is a fact well attested by clinical observation that the ravages of opium excess are spent mainly on the nervous systems before noted, inducing changes that give rise to great nervous disturbance when the opiate is peremptorily withdrawn, unless some mitigating measures be interposed, and which, even in the process of very gradual withdrawal, is seldom, if ever, entirely avoided.

A recital of the varied symptoms of abrupt opiate renouncing is not here needed. Let it suffice to say we regard them all, certainly the most important—the aches, pains, yawnings, sneezings, shiverings, nausea, vomiting, diarrhoea, restlessness, delirium, convulsions, exhaustion, collapse—as reflex indications of great irritation in those centres, and any method having the power to counteract and control this condition must contribute vastly to the patient's comfort and cure.

Heretofore, two plans have obtained in the treatment of opium addiction. One, which may well be called heroic, the entire and abrupt withdrawal of the usual opiate, invariably gives rise to great distress of mind and body, to relieve which various remedies are, at the time, resorted to. Those not fully informed, and desirous of knowing the extent of this suffering, which is far from imaginary as some would have us believe, should consult Levinstein's work, in which are given details of twenty-four cases of hypodermic morphia addiction treated by this method, which the author, by a process of logic, neither safe nor sound, declares to be the best. *This statement we emphatically dispute.* No treatment that entails such suffering as in the cases cited, can claim pre-eminence over one more humane and equally effective. A study of the resultant effects in the instances alluded to reveals evidence of dire distress, in seven cases so extreme, perilous collapse, that a temporary return to hypodermic morphia became imperative to avert a fatal termination.

The other plan, consisting in a very gradual decrease of the usual opiate, meanwhile toning up the system to make amends for the accustomed narcotic, secures the desired result at much less discomfort, and we know of no reason why it should not be just as permanent. It is, however, open to the objection of requiring a much more protracted treatment, a point of importance when time is limited, while it also tends to exhaust the patient's patience, and many refuse to continue till success is secured.

The method we commend is a mean between these extremes, and consists in producing a certain degree of nervous sedation and consequent control of reflex irritation by means of the bromides, though we refer, specifically, to the *bromide of sodium*, having used that exclusively in cases under our care. This plan, which, so far as we are aware, is original with ourselves, is merely a new application of a well-established principle, for the power of the bromides to subdue abnormal reflex irritability is so constant that it may be looked upon as an almost invariable sequel of such medication. Dr. Ed. H. Clarke, in his valuable treatise on the bromides, says "diminished reflex sensibility, however different physiologists may explain the fact, is one of the most frequent phenomena of bromidal medication that has been clinically observed, and is, therapeutically, one of the most important." The testimony of other observers is to the same effect. Gubler, Cuttman, Laborde, Voison, Damourette, Sulenberg, Claude Bernard, Brown-Sequard, and Echoverria, all giving evidence as to the power of these agents over abnormal reflex action, and at the same time, over the general nervous system. Admitting that the symptoms of opiate disusing pertain almost exclusively to the domain over which the bromides exert so decided a control, we have a new field presented for the exercise of this valuable power, and the fact, proven conclusively by our experience, that it *does* exert this happy effect, fully supports the idea advanced as to the pathology of this disease.

In speaking of the bromide of sodium, let it be understood that we refer entirely to the influence of the *continued dose*, by which we mean its administration twice in the twenty-four hours, at regular intervals, so as to keep the blood constantly charged with the drug. A most important difference exists between the effect of this mode of exhibition and that of the single dose, or two or three doses so nearly together as to form practically one, for, in the former case, the system is constantly under the bromide influence, while in the other the drug being largely eliminated in a few hours, the blood is nearly free from it a large portion of the time. Results obtainable from the continued use cannot be gotten from the single dose, and, as a consequence, its value is far greater in the disease under consideration.

Again the action of the continued dose being somewhat remote, three to five days usually elapsing before there is decided evidence in this direction, much more desirable results are secured by its employment for several days *prior* to an entire opium abandonment, meanwhile gradually reducing the opiate, than if the withdrawal be abrupt and then reliance placed on the bromide; for, in one instance, the maximum sedative effect is secured at the time of maximum nervous disturbance from the opium removal, and its counteracting and controlling influence is far in excess of that to be had from its employment after the lighting up of the nervous irritation. What, then, we term *preliminary sedation* forms a peculiar and valuable feature in our giving of the bromide, and it is this special point we commend, our experience having convinced us that we have in it an unequaled means of obviating the discomfort incident to the treatment of this disorder.

The value of the various bromides depends on their proportion of bromine. Bromide of potassium contains 66 per cent, sodium 73, and lithium 92 per cent. We should, therefore, expect a more powerful influence from the latter agent, and, according to Weir Mitchell, it has a more rapid and intense effect. The sodium, however, answers every purpose, and has several points in its favor over the other bromides, is pleasanter to the taste, more acceptable to the stomach, causes little cutaneous irritation, and much less muscular prostration. In this connection, recent experiments and observations by Drs. Ringer and Murrell on the superior value of the sodium salt are of interest and may be found in the *British Medical Journal*, 1883.

Either of the bromides, in powder or concentrated solution, is somewhat irritant, sometimes producing emesis, and in any event, delaying its absorption. A practical point, then, is that it be given largely diluted. Dr. Clarke says, " there should be at least a drachm of water to each grain of the salt." We give each dose of the sodium in six or eight ounces of cold water, and have never known it to cause vomiting.

To secure the requisite degree of sedation within a limited period, it is essential that the bromide be given in full doses. We are convinced that failure in its use, in any neurosis, is very often due to a non-observance of this point. Our initial dose of the sodium is 60 grains, twice daily, at twelve hours intervals, increasing the amount 20 grains each day, *i.e.*, 70, 80, 90 grains, and continuing it 5 to 7 days, reaching a maximum dose of 100 to 120 grains twice in 24 hours. During this time of bromidal medication, the usual opiate is gradually reduced, so that from the eighth to the tenth day it is entirely abandoned. A decrease of one-quarter or one-third the usual daily quantity is made at the outset, experience having shown that habitues are almost always using an amount in excess of their actual need, and this reduction occasions little or no discomfort. Subsequently, the opiate withdrawal is more or less rapid according to the increasing sedation, the object being to meet and overcome the rising nervous disturbance by the growing effect of the sedative, in other words, maximum sedation at the time of maximum irritation.

Exceptions to this may occur. Some patients are so weak and anæmic, on coming, that a previous tonic course is deemed judicious, the usual opiate is continued for a time, and, meanwhile, with good food, tonics and other measures an effort is made to improve the impaired condition, and with success, for we have seen patients gain markedly in strength and weight during this roborant regime.

Sometimes, a patient, before placing himself under our care, has reduced his daily taking to the lowest amount consistent with his comfort. If so, the initial large reduction is not made, but the decrease is gradual throughout. Again, in some instances, no reduction is made for two or three days, at the end of which the bromide effect is secured, in part, and the decrease is then begun. And in all instances, this rule governs, *each case is a law unto itself and the length and amount of the bromide giving and consequent rate of opiate decrease is determined entirely by individual peculiarity as shown both before and during treatment.*

Surprise may be expressed and objection made regarding the extent of the bromide doses, but the fact must never be overlooked that we are not to be governed in the giving of any remedy by mere drops or grains, but by the *effect produced.* Again one effect of opium addiction is a peculiar non-susceptibility to the action of other nervines, necessitating their more robust giving to secure a decided result. More, under the influence of certain abnormal conditions, doses which ordinarily are toxic become simply therapeutic. The annals of medicine abound with instances in support of this statement, and among the most striking may be noted the following : Dr. Southey read before the Clinical Society of London notes of a case of tetanus which occurred in a boy ten years old. The first symptoms of trismus were observed two days after a severe fright and drenching due to the upsetting of a water butt. They steadily increased up to the date of his admission to St. Bartholomew's Hospital, on the eighth day of his illness, when the paroxysms of general opisthotonos seized him at intervals of nearly every three minutes. Each attack lasted from fifteen to thirty seconds, and although between the seizures the muscles of the trunk became less rigid, those of the neck and jaw were maintained in constant tonic cramp. The patient was treated at first with chloral, ten grains, and bromide of potassium twenty grains, every two hours, and, afterwards, with the bromide alone in sixty grain doses every hour and a half. When about two ounces were taken in twenty-four hours, the attacks became less frequent, but at first each

separate seizure was rather more severe, and on the evening of the eleventh day he was able to open his mouth better. On the thirteenth day the bromide was decreased to twenty grains every three hours, and on the fourteenth day was discontinued altogether. When the bromide had been omitted twenty-four hours the attacks returned at intervals of an hour, and the permanent rigidity of the muscles of the neck was re-established. His condition now steadily became worse, so that on the eighteenth day of his illness it became necessary to resort to the previous large doses, one drachm, every hour and a half. After three such doses, the expression became more natural, and he was able to open his mouth again; but it was not until the twenty-fifth day of the disease that it was possible to discontinue the remedy. The patient remained in a state of remarkable prostration and drowsiness, sleeping the twenty-four hours round, and only waking up to take his food for eight days, and passed all his evacuations under him. He subsequently steadily and rapidly convalesced. The bromide produced no ache or other disagreeable effect, and certainly seemed to exert a markedly controlling influence upon the tetanus.

Surely, under ordinary circumstances, no one would think of giving such doses of bromide, but here, under the antagonizing influence of the intense reflex irritation, their effect was vastly beneficial, conducing, beyond question, to the patient's cure.

Given as we commend, no effect is usually noted before the second or third day. Then patients mark an increasing drowsiness, which deepens into slumber, more or less profound, so much so at times that it is difficult to remain long awake. With this is a growing aversion to active exercise, not solely due to lessened muscle force, but largely to mental hebetude. Some cases are met with in which the hypnotic effect is not very decided, but the rule is as stated. Sometimes a saline taste and increased saliva with the bromic breath are noted, and the tongue becomes furred. Acne is usually absent. The renal secretion is, almost invariably, largely augmented. We have known patients to pass more than 100 ounces in the twenty-four hours, and we have noticed this, that where the renal activity is not increased, or is diminished, the sedative effect of the drug is more prompt and decided. The practical point of this is obvious, such cases require a less prolonged bromide giving.

With some there is slight transient loss of co-ordinating power in the fingers, and, exceptionally, in unusually sensitive subjects, there may occur mild startings of the fore-arm tendons. These, however, soon subside, and their going is largely hastened by local faradic seances.

Another bromide symptom, and a curious one it is, refers to a peculiar form of aphasia, as shown by using one word for another,—Brown for Jones, cake for comb, etc. This may persist for several days. Dr. Clarke refers to such instances, and says, "they are hints of a distinct organ of language, and suggest the notion that, inasmuch as the drug we are considering paralyses reflex, before it does generally, sensibility, language may be the expression or correlation of a peculiar reflex power."

Another similar symptom is an odd effect on the memory, the loss of a word or a sentence, and entire inability to regain them at the time, so that the train of thought is abruptly ended. These, though often amusing, are sometimes quite annoying to the patient, but possess no other importance and soon pass away.

Before dismissing this phase of the treatment we must again insist upon the fact that all cases of opium addiction do not require the bromide alike. This is a point of prime importance, and failure to put it in practice, is, doubtless, often the main secret of ill-success or unpleasant results in its use. The patient, as well as his disease, must be treated, and he who uses the bromide, as Fothergill asserts Opie mixed his colors, "with brains," will accomplish far more than the tyro who sets himself up in the treatment of this or any other disorder, and fails to be guided by good judgment. To follow a mere routine giving of the bromine, or any other remedy, unvaried by individual condition, is a sorry showing of professional incapacity. We have lately learned of a case of this kind, presenting a lamentable lack of discretion. The patient, a medical man, addicted to morphia, having decided upon self-treatment, began a plan of operations with the bromide, taking it himself for several days, and then its hypnotic effect asserting itself he gave orders that it should be given him some days longer, and this senseless advice being blindly followed by his attendant, he sank into a stupor which persisted for more than a fortnight. A more indiscreet and foolish performance is seldom heard of, and illustrates anew, in another sense, the truth of that trite legal proverb as to the mental status of the individual who is both lawyer and

client. Let it be distinctly understood that some cases of opium addiction are ineligible for the bromide treatment. Those complicated with serious lesion of the heart or lungs should be excluded, and those in which there is marked general debility should always be accorded a previous tonic course. Lastly, as before asserted, *in each and every case where it is given, the extent of its continuance is to be governed entirely by individual peculiarities as indicated both before and during treatment.*

We now desire to call attention to another point, which our experience has convinced us is of value. We refer to the treatment just after the habitual hypodermic or other opiate is abandoned. Supposing a case where at the end of five to seven days, as individual peculiarity may determine, the desired sedation is secured and the usual opiate reduced to a minimum, say 1-6 to 1-2 gr. each dose, instead of an entire discontinuance, we change the order of affairs and make a break in upon the routine taking, the "habit," so to speak, by giving one full dose, per orem, in the evening. This ensures a sound all-night sleep from which the patient awakes greatly refreshed, and often quite surprised at his good condition, which usually persists during the day. The next evening at about the same hour, the maximum bromide dose and two-thirds of the previous opiate are given. The third evening the same amount of bromide and one-third the first evening's opiate. This ends both opiate and bromide. Exceptionally, the full single dose of opium and sodium is given only one or two evenings. During the following day, if the patient be quiet, nothing is given. Should there be minor discomfort, one-half ounce doses of Fld. Ext. Coca, every second hour, have a good effect. Cases, occasionally, require nothing else. If, however, as usually occur, despite the coca, the characteristic restlessness sets in, we give full doses of Fld. Ext. Cannabis Indica, and repeat it every hour, second hour or less often, as may be required. When the disquiet is not marked, this will control. If more decided measures be called for, we use hot baths, Temp. 105 to 112, of 10 to 20 min. duration, and repeated as required. A short shower or douche of cold water often adds to their value. Nothing equals them for this purpose. Warm baths are worthless. The water must be *hot*, much so as one can bear. We have repeatedly known a patient to fall asleep while in the bath.

And, just here as to "full doses" of the hemp. The dose of the books is useless. As before stated, addiction to opium begets a peculiar tolerance of other nervines, and they must be more robustly given. We give 60 minims Squibbs Fld. Ext., repeated as mentioned, and have never noticed unpleasant results. Small doses are stimulant and exciting, large ones sedative and quieting, hence the latter are seldom followed by the peculiar haschish intoxication. And, lest some timid reader should regard this as reckless dosing, we hope to calm his fears by saying that the toxic power of hemp is feeble, and that these doses are the result of an experience of the drug in many cases, in which smaller ones have failed of the desired effect.

At this writing, two lady convalescents, still insomniac, are nightly taking these full doses with good effect in securing sleep. One recent lady patient, who did not lose a single night's slumber during treatment, and whose need for a soporific ended in eight days, took no other hypnotic whatever. We have used it of late more largely than ever, and with growing confidence in its sleep-giving power, taking, in this regard, almost exclusively, the place of chloral.

Regarding this insomnia, Levinstein and other German writers assert that it will "resist every treatment during the first three or four days." This may be true with them, considering their method, and is, of itself, added proof that they are lamentably lacking in the therapeutics of this disease. Under the plan we pursue, no such sleepless state is noted, and in ordinary, uncomplicated cases, patients can usually be promised recovery without the loss of a single entire night's slumber.

Chloral during the first four or five nights of opium abstinence, fails as a soporific, often causing a peculiar excitement or intoxication, patients talking, getting out of bed and wandering about the room, followed, it may be, after several hours, by partial sleep. Later, in full doses, we prefer 45 grs. at once, rather than three 15 gr. doses; alone or with a bromide, it can be relied on as a hypnotic, but we have thought that in some cases, where it secured sleep, patients, the next morning, felt a certain languor, of which it was, largely, the cause. Some who use the hemp, mention a feeling of fullness about the head and eyes, with occasional confusion of thought, but seldom complain of pain, having noted only one such case.

The bromide, baths, hemp, and coca, with or without capsicum, of which more later, are, therefore, main remedies for the restlessness and insomnia, two symptoms which, with a third, sneezing, are invariable sequelae of opium withdrawal, and, wanting which, patient is surely deceiving his physician.

For relief of neuralgic pains in various parts, which sometimes occur, varied measures suffice. At the head of the list are electricity and the local application of ether. As to the value of the galvanic current in neuralgic headache, so common in opium habitues, and the manner of using it, the reader is referred to a paper on "the prevention of opium addiction," in the *Louisville Medical News*, Feb. 23, 1884. The same agent is effective in relieving limb and lumbar pains, though here a much stronger current is required than can be used with safety about the head. Sometimes a strong faradic acts well, and where one fails, trial should always be made of the other. Local hot baths, sitz or pediluvium, are often of great service for this purpose. Chloroform, locally, relieves; so too, massage.

Regarding the ether, those who have never employed it, will, we are sure, be surprised at its pain-easing power. It matters not how it be applied, spray, drop or lavement, it is potent for good.

These three, electricity, ether, hot water, are our main anodynes, and one special point in their favor is entire freedom from unpleasant gastric or other results.

For relief of minor neuralgic pains other remedies, at times, suffice. Croton chloral, in 5 gr. doses, every hour, is sometimes quite effective in tri-facial disorder. Tonga, in one drachm of fluid extract every hour, is often a reliable anodyne. Its value in some cases seems increased by combining it with the various salicylates. Caffein or guarana occasionally relieve.

Externally, menthol, in solution, two drachms to the ounce of alcohol used with a brush, as a spray, or the menthol cone, is sometimes of service, so, too, the well known camphor and chloral combination, bi-sulphide of carbon and various minor local anæsthetics.

Under this plan of treatment, disorder of stomach or bowels is rare. Our rule is to give an active mercurial or other cathartic, in the outset, if there be evidence of alvine disorder, and then secure regular action by such laxative as is found most agreeable. If the latter be so relaxed as to require restraint, xxx minim doses of fld. ext. colo, or 60 gr. doses of sub. nit. bismuth, every two to four hours often serve a good purpose. They are best given in capsule. If, however, the diarrhœa persists more than 24 hours, the most effective measure is to give a full opiate, tinct. opii., per mouth or rectum, preferred at bedtime. This promptly controls, gives a full night's sleep, and the trouble seldom returns. Fear of an untoward effect on convalescence is unfounded. With our experience, the assertion of one writer that "it is impossible to cure the opium habit," and bridge the patient over the crisis, without having the bowels freely relaxed, seems quite absurd. We have again and again seen patients recover who had only 2, 3, or 4 movements daily. One such, lately dismissed, was a hypodermic taker of 20 grs. morphia, daily, and had been addicted for several years. Others have required a laxative enema in less than a week after the opiate withdrawal.

Formerly, an exclusive milk and lime water diet during the first two or three days of opium abstinence was deemed advisable. This regime is not now imposed, as some patients are able to do dietectic duty, and the rule is to make no restrictions unless the exceptionally occurring stomach or bowel trouble seems to require. More than one patient, habitues for years, did not vomit once. The excessive vomiting mentioned by Levinstein and Obersteiner, they practice abrupt disuse, we have never noted. The former thinks the collapse, which we have never seen observed, in several of his cases, was due to the vomiting and purging. Probably the largest factor in causing it was the exhausting general mental and physical suffering which his monstrous method entails.

If the stomach rebels, entire rest, abstinence from solid food, or all food, for a time, milk and lime water or Murdoch's food, in small amount, often does well. If more active measures be required, sinapisms, ether, Faradism externally and internally, bismuth, chloroform, Menth. pip., ice, are of value. If all fail, a full opiate, hypodermic, will promptly suffice.

Having thus crossed the opiate rubicon, treatment relates, largely, to the debility and insomnia. For the former, of internal tonic-stimulants, coca leads the list. But our experience does not warrant Morse's assertion "coca cures the opium

habit"—that is a mistake. While it is of great value in relieving the varied symptoms of lessened nerve tone, it is *not a specific*. Patients, long used to opium cannot abandon it and trust to coca alone, to carry them over the crisis. This, save in mild cases, it will not do, but, conjoined with other measures, it is strong for good. Of a reliable fluid extract, we give it sometimes before, and always after the acute restlessness, in 4 to 8 drachm doses, every two hours, or less often as required, and continue in these full doses, at increasing intervals for several days. As need for it lessens we decrease the dose to one or two drachms, and this amount, ter die, combined with other tonics may sometimes be continued with advantage for weeks. As a rule, however, its use is quite abandoned within a fortnight. Its effect, while noted in from three to twenty minutes, seldom persists more than two or three hours, so that, when the demand for it is active, it is best given at this interval. To remove the mental and physical depression, the minor neuralgiæ, and the occasionally occurring desire for stimulants observed in these cases, nothing equals it, being in this regard more nearly a specific than any drug at command: and capsicum, in doses of one-half to one drachm of the tincture, with the coca often adds to its value. For details of this drug and its uses, see "a Case of Coca Addiction," reprint of which can be had of the writer.

Another agent of much service is general faradization, 20 min. seances daily, the feet on a plate to which the negative pole is attached, while the other electrode, encased in a large sponge well wet with warm water, is applied to the entire surface, with a current strong enough to be thoroughly felt, but not painful. This imparts a grateful sense of exhilarating comfort, and is the most effective tonic at command. Thus applied or with anode to cervical spine it may be used daily so long as indicated, taking care not to overdo, for a current too strong or prolonged works mischief, overstimulating and exhausting to the extent, it may be, of several days discomfort, which nothing but time will remove. Very exceptionally, faradism disagrees and has to be abandoned.

Alternating with or following we may use the galvanic current. This is a general tonic of special value in these cases. Our method is, positive pole to nape of neck, and negative to epigastrium for five minutes; then the former behind the angle of each jaw for one or two minutes, making the entire seance of 7 to 9 minutes.

Next to the electric tonic ranks the cold shower bath. It certainly is a great invigorator, and many a patient who dreads it at first, soon comes to appreciate it most highly. If agreeing it should always be taken. With some it acts as a hypnotic. We recall one instance, in particular, of a medical gentleman, who, still somewhat insomniac, after sleeping two or three hours and awaking with no prospect of further sleep, would take a shower, followed by vigorous rubbing, and soon fall into a refreshing slumber lasting until morning.

Internal tonics of course have a place in the roborant regime, varied as the case may demand. In some cases we employ them from the outset, and the use of tinct. ferr. murr. in large doses, 15 to 20 min. thrice daily, has seemed in virtue of its tonic-astringent effect, to serve a doubly good purpose, in lessening the tendency to alvine relaxation. After the opiate disuse, an excellent combination fld. ext. coca with syr. hypophosphites iron, strychnine and quinine, two drachms of each after meals. Another, Fowler's solution or tinct. nux vomica with dilute phosphoric acid or acid phosphate. If anemic, ferric tincture or Blanchard's pills. Digitalis is often useful in many cases, cod-oil is of value, and may be continued for months. We make choice, as required, of emulsion with pepsin and quinine, emulsion with phosphates or plain oil.

Some degree of anorexia is always present, yet it may not prevent the regular meal, and need never occasion anxiety, for probably it will soon give place to a well-marked reverse condition, which may be encouraged to fullest feeding short of digestive disaster. The appetite often becomes enormous, and sometimes, restraint and digestive aid are demanded. If it be slow in returning, rousing measures will suggest themselves. In such cases it has seemed a good plan to stir up the alvine system, once or twice a week for a time, with a mild cathartic at bedtime, or a full morning dose of hunyadi.

One result of the opiate quitting and the regime noted is often a greatly improved nutrition, as shown by a notable increase in weight. One physician, not long since dismissed, gained a pound a day, and another convalescent has lately been adding to his avoirdupois at the rate of twelve pounds a fortnight.

Regarding the insomnia, Levinstein says, "sleeplessness, which is generally protracted up into the fourth week, is very distressing." For reason before given, his assertion is not surprising. Our record differs. Wakefulness is an invariable sequel and requires soporifics for a time, but is not so prolonged and does not resist treatment. We have known a patient able to dispense with hypnotics in five days: others in eight, and nearly all within a fortnight. Sometimes, they are longer required. Two patients, both physicians, during the last year, did not regain natural sleep for three or four weeks, but this is quite exceptional.

This insomnia is of two kinds. Most patients, after the acute has been passed, soon secure sleep on retiring, but waken early, two or three o'clock, and fail to get more. Others remain awake nearly all night before slumber comes, and these are the ones who usually require soporifics the longer.

For relief of this, cannabis indica or chloral with bromide, in full doses, serve our purpose. If, as rarely happens, the wakeful state is so pronounced or prolonged, despite treatment, as to distress the patient, we never hesitate to give a full opiate sub rosa, and always with good result. In all cases drugs should be dropped soon as possible, and sleep secured by a fatiguing walk, or other exercise, an electric seance, a Turkish, or half hour's warm bath with cold douche or shower, a light meal or glass or two of hot milk, one or more of these before retiring.

Patients whose slumbers end early often note a peculiar depression on waking, and when such is the case, a lunch, milk, coffee, coca, or Murdoch's liquid food should be at their command.

It may be well, in passing, to refer to certain minor sequelae and their treatment. Occasionally a patient complains of dyspnea, or palpitation. We have never noted them but twice, both ladies. A stimulant, coca with capsicum, or Hoffman's anodyne with aromat. spts. ammonia will promptly control.

Some patients are at times annoyed by aching pains in the gastrocnemii, that may recur during several days. Fld. ext. gelsemium, in full doses, strong galvanic or faradic currents, massage, local hot baths, and topical use of chloroform or ether will relieve.

Others mention a peculiar burning in the soles of the feet which mustardizea pediluvia and full doses of quinine usually control.

Sometimes, a dry hacking, paroxysmal cough, more marked at night, may discomfort a patient for a time. It can be relieved by nitrate of silver spray 10 to 20 grs. to the ounce; a bromide of sodium gargle, 60 grs. to the ounce, or a small blister to the sternum.

Returning sexual activity, as shown by nocturnal emissions and erections, as a rule, requires no attention. We once noted, however, a case where the awakened virile vigor was so marked that repressive measures were demanded.

The periodical function of females, which, usually, is irregular or suspended, has, so far as we have observed, required no special after-treatment.

Along with what has been suggested, should be such other general hygienic measures as will add to the good secured. Patients *must* be given attractive surroundings, cheerful society, diverting occupation and amusement, and freedom from care or worry of body and mind, in fact anything, everything, that will aid in the effort to secure a return to pristine health and vigor. That the management of these cases *subsequent* to the need of *active* professional care, is of great importance, enlarged experience increasingly convinces. Neurotic or other disorders noted prior to addiction, whether genetic or not, must be relieved or removed. So, too, with those that may first appear after the opiate disusing: and when none of these are met, when there is merely a lessened power of brain and brawn, ample time, months or years, if need be, must be taken in which to get thoroughly well, if the chance of a relapse would be brought to a minimum.

It is not to be supposed that a system shattered by opiate excess will regain its normal status within a week or a month, nor that a premature return to mental or physical labor will not imperil the prospect of permanent cure. The importance of this must be insisted upon. To medical men, who compose so largely the better class of habitues, it is especially commended. Professional work must not be resumed too soon. The frequency of a narcotic return is in reverse relation to the length of the opiate abstention, and, as favoring this abstinence, prolonged rest, change of scene, foreign travel, sea voyages, all have much promise of good.

The absence of reference to certain remedies which have been mentioned by some as especially useful in the treatment of this neurosis may be briefly noted. Belladonna has been supposed to have a special value. We once used it to the extent of dry mouth and disturbed vision during the opiate withdrawal, but have quite abandoned it, for the simple reason that we found, on trial, patients did fully as well without it, and the freedom from its peculiar effect certainly added to their comfort. Whatever its antagonistic influence in acute opium taking we do not believe it possesses any such virtue in the chronic form.

Quinine in large doses, from the outset, or grs. II. to IV., increasing with the opiate reduction, has been thought to have special value. We have failed to note it, though as a tonic it is well adapted to all cases, and in some patients, 20 gr. doses as an anodyne or soporific act well.

Strychnine is another valued tonic, especially in a very gradual opiate decrease, or at weekly or fortnightly reductions. It has no other claim.

Hydrocyanic acid dilute, aconite and veratrum viride have been suggested. Why, we fail to understand.

Jamaica dogwood has been commended as an opiate substitute, and Morse lauds it extravagantly. He, however, is an enthusiast, and, as such, goes quite too far.

Regarding its use, he says; "coca cures the opium habit, Jamaica dogwood does more than this, it is prophylactic of this disorder. By its use the baneful habit is forbidden the system. This, we think, is nonsense, and have no hesitation in declaring our belief that it is a most mistaken opinion.

And, again, "As an hypnotic opium is not of greater worth," and, "as an anodyne, opium is its only peer." Our experience is entirely contrary to any such assertions. We have made frequent trial of it, the results were uneven. In a few cases the minority, as an anodyne, it seemed efficient. As a hypnotic, it always failed. Morse puts the dose at "fld. ext.: dose min. v. xv." Our ill result, certainly, was not due to the limited quantity, for we usually gave it it in *two drachm* doses. More recent trials have proved utter failures. One as an anodyne in neuralgia, four one drachm doses, half hour interval, no relief whatever. Another, as a soporific: six one drachm doses, same interval, no sleep. It is a nauseous drug, and the aversion to continuing it may sometimes account for its failure. Our patients, too, may be peculiar, but, be that as it may, we have little faith in its value, and now seldom employ it.

Avena sativa has been largely lauded. We have given it again and again, in doses large and small, in water hot and cold, at intervals short and long, and always found it *worthless, absolutely good for nothing.* Bottle after bottle has been left with us by those who made trial of it in vain, and their experience accords with many who have written us, some of whom have taken the "drug" *in ounce* doses several times daily, and used *pounds* of it in the trial, without good!!! Let no one be beguiled into the belief that oats fills the "long felt want." Correspondence has furnished material for a paper which will, we think, quite disprove its vaunted virtue.

Hyoscyamia is a powerful drug, and in some cases may be of service. We once used it, but the need for it now seldom arises. Its employment should be limited to patients in good general condition, in whom the opiate disusing is attended with unusual insomnia and motor activity. In such instances its good effect is sometimes surprising, bringing quiet and sleep with a promptness and power almost startling. We use Merck's amorphous dose 1-12 to 1-16 of a grain hypodermically. This in these patients may be deemed the usual dose. With some, however, this causes a mild delirium without sleep, and in such cases the dose must be increased. Regarding its safety, Dr. John C. Shaw, superintendent of the King's Co. Insane Asylum, has assured us that it is largely given in that institution with as little fear of ill effects as would attend the use of morphia.

The new alkaloid of Indian hemp, tannate of cannabin, commended by German authority, proved an entire failure in our hands. In ordinary insomnia, however, it may act well.

The latest claimant for professional favor as a soporific is paraldehyde. Dujardin Beaumetz lauds it, and claims special value in these cases. Our experience does not warrant such statement. In full doses, 4 to 8 grammes, 60 to 120 minims. It sometimes brings sleep; unlike chloral, in the early nights of the opium abstinence, it does not excite. In most cases both are inferior to Indian hemp. It is best given in one half to one ounce of syrup flavored with peppermint, ginger or vanilla, and then added to a wineglassful or two of ice water.

Non-mention of alcoholic stimulants has perhaps been noted. We rarely use them, the reason is varied. They are seldom called for. Very exceptionally, champagne, milk punch or ale may be indicated, but our rule is, *never to use any form unless imperatively demanded:* and the advice of Levinstein that "those who have an intense craving for alcoholic beverages may be allowed to drink wine in unlimited quantities," is, we think, *positively pernicious.* As Bartholow says, "When the nervous system is losing the loved morphia impression it will take kindly to alcohol;" and he adds: "I especially warn the practitioner against a procedure which the patient will be inclined to adopt, that is to take sufficient alcohol to cause a distinct impression on the nervous system in place of the morphia. This must result disastrously, for when the alcohol influence expires there will occur such a condition of depression that more alcohol will be necessary."

With these opinions we are quite in accord. The fact must not be forgotten that some habitues have used alcohol with morphia: others have taken morphia after addiction to the former, and, in general, habituation to any stimulant or narcotic, begets a liability to take to another in case the original one is abandoned. As a factor in release, alcohol-taking ranks next to a re-use of opium. The risk, then, is obvious, and let the physician beware lest, in the effort to aid his patient in escaping one peril, he but involves him in another yet greater.

Some details of treatment, apart from the strictly remedial, may be of interest. Our rule in making the opiate decrease is not to inform the patient as to its progress, nor the actual time when it is ended. Better tell him when days have elapsed since the last dose, and then the assurance that so long a time has gone by since his enemy was routed will, of itself, be an aid in finishing the good work. The incredulous surprise with which this knowledge is received by some patients who have made frequent but futile efforts to escape, is quite notable.

As regards the manner of taking, a radical change is made. If hypodermically, the syringe is at once discarded and a sufficient amount of morphia or opium per orem given. In many cases resort to the morphia or opium can be made at once. If so, it should be done. If not, their use giving rise to nausea, vomiting or headache, as exceptionally they may, the usual method can be resumed for two or three days, and then the bromide influence having been secured in part, the syringe may be put aside, and the opiate used without unpleasant effect.

A German writer some time ago asserted that many patients taking more than four grains, 25 to 30 grammes, hypodermically daily, will get along fairly well with the same amount of morphia by the mouth. We have not found this to be the case. On the other hand, three times the subcutaneous supply as advised by Bartholow is more than enough. An increase of one-half or double the amount will usually suffice.

Patients may demur to the change, but it should be insisted on, for experience has proven many points in its favor. In the first place, we believe there is, with some, a certain fascination about the syringe, which, once ended, makes an advance towards success in treatment. Many patients come to think that the injections are absolutely essential, and to convince them to the contrary, as the change in taking will, inspires a feeling of gladsome relief and larger confidence in a happy result.

Again the *staying* power, so to speak, of morphia or opium per orem, is much greater than by subcutaneous taking. Of this there is no question. Morphia, hypodermically, is more quickly followed by the peculiar effect of the drug, which, too, is more decided, but earlier subsides, a higher acne sooner reached, to decline more rapidly; whereas by the mouth, or in the form of opium, the rousing effect is more slowly developed, but it is on an evener plane, and more persistent. Patients accustomed to four, to eight injections daily, will do well on two or three doses per orem. One medical gentleman, now under treatment, who had been taking six injections daily, is doing perfectly well on one dose of opium by the mouth, night and morning.

As a rule, too, the change in taking brings about a marked improvement in the patients' condition. We have known them, after using the new method a few days, to declare that they felt better than for years. In many ways, notably increased appetite and improved alvine action, is the change for good.

Still more, those who quit the syringe, and take morphia or opium, usually cross the rubicon of their opiate disusing with withdrawal symptoms so largely lessened as to make this result alone ample reason for the course we commend.

During the decrease, patients are permitted, if desired, to continue their frequency of taking. As a rule, however, by reason of the greater sustaining power of morphia or opium by the mouth, it is not required.

The only restriction imposed is that a certain amount shall suffice for twenty-four hours supply, and this is daily decreased, according to individual need, at such rate as will least likely conflict with their comfort. Patients, moreover, are always instructed that if the amount allowed does not suffice they are to apply for and will be given more. Such being the case, no proper motive exists for secret taking, and if, despite this liberal proviso, it is indulged in, professional relations are suspended.

This being our plan, it will be inferred, and rightly, that we do not subject patients to such surveillance as compels their taking a bath, during which search is made for contraband morphia. Nor do we have an attendant "dogging" their steps during the decreasing regime. No patient with proper self-respect would submit to such treatment without resenting it: and it is not likely to strengthen the confidence that should always exist between patient and physician, and which, with us, is asked for and given. Very seldom is it violated. Patients come to us for relief: they are willing to aid in the effort to secure it, those who are not we decline to accept, and the result is, success.

It is sometimes asserted that all opium habitues are liars, and that, on presenting themselves for treatment, they are always equipped with a syringe and supply. Such a sweeping assertion we do not believe, *we know* it is *not true.* Why, then, should we humiliate them after such a fashion, degrade them by imposing such detective surroundings? Others may, we will not, and as yet we have no reason to doubt the wisdom of our course.

Clandestine taking, either before or after withdrawal, can always be detected. The absence of certain invariable sequelæ of an honest quitting is positive proof of deception; while the presence of morphia in the urine after the time when it should disappear, along with other symptoms, furnish added evidence beyond dispute.

It will again be inferred, and also aright, that we do not practice any such plan as Levinstein advises, when he says: "As soon as the patient has consented to give up his personal liberty and the treatment is about to commence, he is to be shown into the room set apart for him for the period of eight to fourteen days, all opportunities for attempting suicide having been removed from them. Doors and windows must not move on hinges, but on pivots, must have neither handles nor bolts nor keys, being so constructed that the patients can neither open nor shut them. Hooks for looking-glasses, for clothes and curtains, must be removed. The bed-room, for the sake of control, is to have only the most necessary furniture; a bed, devoid of protruding bed-posts, a couch, an open wash-stand, a table furnished with alcoholic stimulants, champagne, port wine, brandy, ice in small pieces, and a tea urn with the necessary implements. In the room, which is to serve as a residence for the medical attendant for the first three days, the following drugs are to be kept under lock and key, a solution of morphia of 2 per cent., chloroform, ether, ammonia, liq. ammon. annis, mustard, an ice bag, and an electric induction apparatus. A bath room may adjoin these two apartments. During the first four or five days of the abstinence, the patient must be constantly watched by two female nurses."

Now what means this rigorous regime? First, that the lack of efficient medical measures essentiates physical force. Second, that the method employed entails such distress of mind and body as to risk a suicidal ending; and that a great calamity always impends—collapse that threatens life, and demands that the Doctor be closely at hand to avert the dreaded danger!

In strong contrast with what has been quoted, during our opiate withdrawal patients are not only permitted but encouraged to go out and about, attend entertainments, and engage in social domestic pleasures; and this is continued throughout treatment, save a transient suspension following the first twenty-four hours of opium abstinence. After the first day of opiate disusing, patients are, for a time, under careful attention, and, if required, an attendant is with them, but the need for services of this sort is, usually, quite limited, and in some instances entirely dispensed with. Again and again have patients presented, who fully expected the rigorous regime imposed by Levinstein, but who were happily surprised to find it was not demanded, and who were fully convinced, before their treatment ended, that it was not at all essential.

As between this method and the barbarous plan of those who counsel and compel heroic withdrawal "comparisons are odious."

In this day of advanced therapeutics the writer holds radical opinions as to the *utter inexcusability*, the *positive malpractice* of subjecting patients of this class to that torture of mind and body the German method entails. It is wrong, grievously wrong; more, it is *cruel* to demand that they shall run the gauntlet of such suffering.

In various papers we have expressed our view on this important part of the subject, and enlarged experience tends only to confirm them. More and more pronounced is our belief "that no physician is warranted, save under circumstances, peculiar and beyond control, in subjecting his patient to the torturing ordeal of abrupt withdrawal. We are well aware that it has the sanction of men otherwise eminent in the profession, but we venture to suggest, with no lack of respect to these gentlemen, that, like a somewhat famous nautical individual, "they mean well, but they don't know." Theory is one thing, practice another, and we are quite certain, were they compelled to undergo the trial, there would be a rapid and radical change of opinion. We regard it as cruel, barbarous, "*utterly unworthy the healing art.*"

"We care not who advocates it, but speak feelingly, emphatically and advisedly on this point, for the simple reason that our experience, again and again repeated, proves beyond all dispute that the opium habitue can be brought out of his bondage without any such crucial suffering as this method of treatment entails."

Bartholow says:—"Having had one experience of this kind, I shall not be again induced to repeat it, if for no other, for strictly humanitarian reasons, since the mental and physical sufferings are truly horrible."

For proof of this and more in detail, the reader is referred to papers by the writer: "Clinical Notes on Opium Addiction," Cincinnati *Lancet and Clinic*, March 3, 1883; "Neurotic Pyrexia with special reference to opium addiction," New England *Medicat Monthly*, June, 1883; "The Treatment of Opium Addiction," *St. Louis Courier* of Medicine, June, 1883; and "A personal narrative of Opium addiction," New York *Med. Gazette*, July 7, 1883, reprints of which can be had, if desired.

More, many unaware that a more humane method is at command, and dreading the ordeal of abrupt disusing, refuse to accept it, and, continuing their narcotic, bind all the more closely "the web that holds them fast as fate." During the past year a medical gentleman nine years addicted to morphia came under our care. Six years ago he first consulted us. During this time he had read Levinstein's book, and the dread of such suffering as that author's patients underwent was, he avowed, the reason for his delay in making an effort to quit the morphia. Finally, summoning sufficient courage, though not without much apprehension, the trial was made, and with the most gratifying success, for, greatly to his surprise and pleasure, he made a notably good recovery, with so little nervous disturbance that not a single bath was called for, and with such freedom from pain that not once was an anodyne demanded, and was dismissed on the 26th day of his treatment. Commenting on his case he declared the manner of his recovery seemed "almost miraculous," and asserted that, had he ever thought so much could be accomplished at so little cost of time and discomfort his effort, years earlier, would have been made, and in a recent letter he wrote: "My own swift and easy passage of that 'one more river to cross,' is an ever recurring source of wonder and astonishment to me, and not a day passes, not a morning comes, without a keen sense of exultation at my escape from the old slavery, a blessed freedom from the old self-accusing conscience, and a return of the old instinctive habit of looking every man straight in the eyes! I think I shall never entirely get rid of a certain shadow of the past; nearly nine years of mental distress, which I thought well-nigh hopeless, most leave a deep and ugly scar at my time of life, but, thank God, that I have only the scar to trouble my memory and not the festering, corroding ever-present ulcer which made me unspeakably wretched and kept me in continual fear of discovery."

Reference to this is made simply to support our statement and convince, it may be, some hoping, yet dreading that scientific treatment has much to promise for their relief.

Before closing, let it be noted that this, beyond question, is a vincible disease, and re-assert, vide "opium addiction among medical men, that repeated experience warrants the assertion that every case of opium addiction free from organic disease, and in which there is an earnest desire to recover, be the extent and duration what it may, admits of prompt and positive relief."

Society Proceedings.

MEDICO-CHIRURGICAL SOCIETY OF MONTREAL.

Stated Meeting, October 24th, 1884.

T. G. RODDICK, M.D., PRESIDENT, IN THE CHAIR.

Missed Abortion.—Dr. ALLOWAY read a paper on this subject.

Dr. KENNEDY said he did not like this new name, "Missed Abortion," especially if applied to the retention of a dead fœtus over five months old. He said it was well recognized that the fœtus might die, become mummified, and be retained, or, after its death, it might be expelled and the membranes alone be retained.

Dr. CAMERON also took exception to the term "missed abortion," as not being precise. He mentioned that McClintock made fun of the term by saying that when a woman went to full time it was a case of missed abortion. He prefers calling a blighted ovum a *mole.*

Dr. TRENHOLME said there was no question as to a dead fœtus being retained in some cases for several weeks or months. The only point was as to whether the specimen exhibited was so retained or not. The indications led him to question its long retention, and to regard it as one of a series of early abortions. In those cases of retained fœtuses which had come under his observation, he had found an abnormal condition of the decidua —the reflex decidua being distinct and separate from the uterine decidua, which is strongly adherent throughout. In this way the enveloped fœtus became a sort of tumor, frequently causing hæmorrhage, and its growth being interfered with, the subsequent death of the fœtus is due to the compressing force of the reflex decidua. In his cases he found the decidua very strong indeed, a good deal of force being required to rupture it and allow of the removal of the fœtus. Dr. T.'s theory is that there is sufficient vital union existing to prolong the retention, while the pressure is such as destroys life. It is only when the contents of the uterine cavity become separated to such an extent that the contained mass acts as a foreign body that uterine contractions ensue. This is true whether the contents to be expelled is an early or late product of conception. The fact of the non-union of the reflex and true deciduæ accounts for menstruation during pregnancy; also for the well-known fact that frequently no harm follows the use of the sound, nor even the application of remedial agents to the cavity. Of course the separation of any part of the placenta would be apt to be followed by uterine contractions.

Dr. CAMPBELL said he had a patient with symptoms indicating treatment by means of applications to the interior of the uterus. He first passed a sound and afterwards painted with a solution of iodine and also acid. nitrate of mercury. This was done four or five times before the real cause of her trouble was found out by her aborting.

Dr. ALLOWAY said, in reply to those gentlemen who took exception to the term "missed abortion," that if a better one could be suggested he would gladly accept it. Dr. McClintock's little joke was simply an *Irishism*, and was not intended to convey any literal meaning. Dr. A., however, drew attention to the error of confusing the terms Missed Abortion and Fleshmole. He referred to his definition of the terms relatively, as given in the body of the paper, which distinctly shewed that the term missed abortion alluded to "*a condition*," and that a mole was "*the product*" of this condition—in fact, a pathological specimen; and that the terms could not be used with any other meaning or relationship. In conclusion, Dr. Alloway said he felt much gratified with the kindness shown by the members who had discussed his paper, more especially for their complete recognition of the correctness of his views relating to this interesting subject.

PATHOLOGICAL SPECIMENS.

Dr. SUTHERLAND exhibited the following specimens :—

1. *An Appendix Vermiformis, containing 14 snipe shot.*—This was removed from a patient who died of chronic Bright's disease, and who had been a lover of game.

2. *Intestines from a case of typhoid fever*, where the patient died on the ninth day of illness, and before ulceration had taken place. The Peyers' patches were swollen and raised about a quarter of an inch. This patient was admitted into the hospital on the sixth day in an unconscious condition, and remained so until death, three days later.

3. *A heart, showing calcification of the valves of a congenitally narrowed aortic orifice.*—Dr. Ross said this had been removed from a gentleman, a traveller, stopping at one of the hotels. He had suddenly taken ill with alarming symptoms, and was sent to the hospital. When admitted he was ruffering from dyspnœa, and died shortly afterwards.

4. *Abscess of the Liver.*—Patient, a woman, was admitted into the hospital under the care of Dr. Molson, with the following symptoms: Pain and tenderness in both iliac fossæ; worse in the right. Had a quick pulse, and was suffering from dysentery. She died in 48 hours. There was a history of having had an attack of illness, with similar symptoms, about a year ago, and lasting five weeks. The *post-mortem* showed signs of an old peritonitis in the region of the right iliac fossa; also signs of recent peritonitis in right hypochondriac region. Flakes of lymph were adherent to the under surface of the liver. On removing this organ pus was seen oozing from a small opening on its under surface, where rupture had taken place, Fifty or sixty ounces of pus were removed from the cavity in the liver.

5. *Horse-shoe Kidney*, also from a hospital patient, aged 32 years. The right half was healthy: left half was filled with pus. A large calculus in the pelvis blocked the exit of urine; several small calculi were seen in the calyces. The microscopic appearance of the right kidney was normal. Both lungs were riddled with cavities. This patient had been admitted with phthisis. On admission the urine contained 50 per cent. of albumen. There was excessive pain in the left lumbar region with frequent micturition. At first he passed large quantities of water, it became less, and, during the last 36 hours, scarcely any came away.

6. *Pyo-pneumo-Thorax, showing ulceration from a large lung cavity into the pleura.*—This specimen was removed from a man aged 27, admitted into hospital August 1st, 1884. He was a stonecutter, of steady habits, a moderate drinker, and belonged to a phthisical family. He had typhoid fever eight years ago; had coughed and expectorated ever since. He had failed rapidly during the last seven months, and had suffered with severe cough, fever and sweating. Four days before admission he took a sudden sharp pain at the left apex, and, shooting downwards, was accompanied with great dyspnœa. There were now present signs of softening tubercular deposit in the right lung; the left was leudly tympanitic, with feeble amphoric respiration. The heart was pushed to the right. Whilst in hospital there was extreme dyspnœa (orthopnœa), with irregular hectic fever and profuse sweating. On Aug. 5th, distinct succession sounds were heard; breathing amphoric, loud and distinct to the base. Dullness up to the tenth rib on leaning back; loud, clear resonance down to twelfth rib leaning forwards. This condition persisted till death took place from exhaustion on the 17th September.

Special General Meeting, Oct. 31, 1884.

T. G. RODDICK, M.D., PRESIDENT, IN THE CHAIR.

This meeting was called to consider Dr. Tuke's report on the Insane Asylums of the Province of Quebec, and generally to discuss the treatment of the insane in this province.

Dr. CAMPBELL, who opened the discussion, strongly denounced the present farming or contract system, and deplored the lack of skilled medical treatment in our asylums.

Several resolutions were read and spoken to, Drs. Trenholme, Shepherd, Kennedy, Geo. Ross, Reed, G. T. Ross, Cameron, McConnell, Mills and the President taking part.

The following are some of the chief objections mentioned by the speakers to the present system of managing the insane poor of this province: That it led to cheap everything—attendants, care, fare, etc.—and to an entire absence of skilled medical treatment, which latter want resulted in a minimum of cures and the excessive use of mechanical restraint.

Dr. CAMERON read portions from the Lunacy Act for the Province of Quebec, passed last June, and which he characterized as being very loose, incomplete, and apparently drawn by an amateur. No blame was attached to the ladies of the Long Point Asylum or to Dr. Henry Howard, the onus being placed on the Government.

Dr. HENRY HOWARD, who was not present, sent a written communication, criticising Dr. Tuke's report and expressing his disapproval of the contract system.

A committee was formed to draw up resolutions embodying the sentiments expressed at this meeting, which resolutions were to be forwarded to the Government.

Stated Meeting, Nov. 7th, 1884.

T. G. RODDICK, M.D., PRESIDENT, IN THE CHAIR.

Dr. ALLOWAY exhibited the following Pathological specimens:

1. *A Fœtus of two months*, complete in its sac.

2. *A Fœtus three months old*, shewing arrest of development of the abdominal walls, and through which opening the bowels protruded.

3. *A Fibroid growth the size of an almond*, removed by him from the anterior wall of the vagina, just inside the introitus. The woman had suffered from hæmorrhages, and her health was broken down, largely, no doubt, from septic poisoning, as the little growth was sloughing. Since its removal the hæmorrhages have ceased, and the patient's health has very much improved.

Dr. TRENHOLME exhibited a *Pair of Ovaries* removed by him the day before from a woman aged 28 years, who has suffered from pelvic distress since she was 14 years old. Six years ago she had a child, after a difficult labor, from which time her sufferings have been worse, quite incapacitating her for her duties. On examining her he found in Douglass' fossa a tumor which he took to be a diseased and enlarged right ovary, and decided to operate. On opening the abdomen the left ovary was also found to be enlarged to about the size of an egg and filled with fluid. It was first removed, along with its tube: Much greater difficulty was experienced in removing the right, as it was firmly fastened down in Douglass' pouch. It was about the size of a large walnut, and filled with pus. Dr. Trenholme said the patient was doing well; pulse 82, temperature normal.

Perforation of a Typhoid Ulcer in the Colon; Peritonitis.—Dr. Ross exhibited the specimen and related the case. The ulcer was situated about a foot from the ilio-cœcal valve. The patient was sent to hospital on the 21st day, with a good pulse, temperature 99° to 100°, the only bad symptom being tympanitis. Dr. R. remarked that it was very unusual to find a perforating ulcer in the situation of this one. They are found much more commonly in the ileum. Tympanitis had been a prominent symptom, and resisted all treatment. It did not arise from constipation and retained decomposing fæces, as is sometimes the case, as care had been taken to prevent this, and the autopsy showed the bowels to be nearly empty. It made the prognosis bad. The onset of perforation and subsequent peritonitis were well marked.

Dr. TRENHOLME asked why not perforate through the abdominal wall to let out gas.

Dr. Ross said there were no distressing symptoms present, and it was not clear that this was always a safe proceeding.

Dr. HINGSTON remarked that it was a common thing for a farmer to open the distended abdomen in cattle.

Dr. Wood showed a patient of his recovering from a lengthened attack of sycosis and read a paper on this subject which will appear in our next issue.

Dr. SHEPHERD said it was easy to diagnose sycosis from acne and eczema, and spoke highly of Shoemaker's treatment of parasitic skin diseases with the oleates.

Dr. BLACKADER gave his experience in treating *tinea tonsurans* by means of oleate of copper ointment. Thirty cases occurred among the children of the Hervey Institute during the past spring and summer. Marked improvement and cure followed the use of an ointment of the strength of from 1 to 8 to 1 to 12, very little irritation being produced.

Dr. CAMERON said dermatologists were finding out that vaseline, though very elegant, was not so useful a vehicle as lard for making ointments intended to cure the parasitic skin diseases. Lard, having more affinity for animal tissues, penetrates deeper. The best vehicle for oleate of copper is oleic acid. The oleic acid, of English manufacture, should first be heated, after which the oleate of copper is to be stirred in.

Dr. HINGSTON said it was necessary to make first a correct diagnosis between eczema and tinea sycosis. Tinea sycosis is a simple inflammatory disease, so that parasiticides were not necessary. He uses epilation of the diseased hairs only, a bread and milk poultice, and attendance to the digestion. He always cures this way, and in a few days.

Dr. CAMPBELL had seen six cases of the parasitic form of sycosis, and only one of the non-parasitic. He had been successful in curing six or eight cases of tinea tonsurans lately with the oleate of copper ointment.

The PRESIDENT made a few remarks, in which he said that he had seen but very few cases of this parasitic form of sycosis.

Progress of Science.

SULPHUROUS ACID IN SCARLATINA MALIGNA.

Dr. Keith Norman McDonald, writing to the *British Medical Journal*, denies the prevalent opinion that no reliance can be placed on any drug in cases of scarlatina, and does not hesitate in affirming that, when properly applied, both locally and internally, sulphurous acid is by far the most efficacious remedy that we possess. He continues, " I have had several opportunities of testing its efficacy in some of the worst cases I have ever seen, during the epidemic which has been rife in this town (Cupar Fife) for the last two months, and I am bound to say that of all remedial measures in this disease it is, in my opinion, the most reliable. My treatment is as follows: The moment the throat begins to become affected I administer to a child, say about six years of age, ten minims of sulphurous acid, with a small quantity of glycerine in water, every two hours, and I direct the sulphurous acid spray to be applied every three hours to the fauces for a few minutes at a time, by using the pure acid in severe cases, or equal parts of the acid in water, according to the severity of the case. Sulphur should be burned in the sick-room half a dozen times a day, by placing flower of sulphur upon a red-hot cinder, and diffusing the sulphurous vapor through the room until the atmosphere begins to become unpleasant to breathe.

" In the worst cases, where medicine can not be swallowed, this and the spray must be entirely relied upon; and the dark sordes that collect upon the teeth and lips should be frequently laved with a solution of liquor potassa permanganatis of the strength of about one drachm to six ounces of water, some of which should be swallowed, if possible.

" In cases presenting a diphtheritic character, the tincture of perchloride of iron should be administered in rather large doses in a separate mixture with the chlorate of potash, and equal parts of the same with glycerine should be applied locally with a camel's-hair brush several times in the day; but as in the majority of cases among children it is next to impossible to use a local application more than once, the spray and permanagate solution will prove of great service.

" As to other remedies recommended by various authors, ammonia is nasty, and can not be taken well by children: carbolic acid has the same fault, and cannot be applied properly. Gargles are also useless in children, because they seldom reach the diseased surfaces, and warm baths and wet-sheet packing are dangerous, because they are never carried out properly in private practice. The hypodermic injection of pilocarpin is a remedy that may give goo dresults hereafter, but I have had no experience in its use."—*N. Y. Med. Jour.*

GOOD REMEDIES OUT OF FASHION—EMETICS IN BRONCHITIS, STOMACH DERANGEMENTS, &c.

By CHARLES J. HARE, M.D., Cantab., F.R.C.P., &c., London.

Sometimes with us not only do things come into, but they also go out of fashion; and remembering as I do the days of yore, I think that, deluged as we now are with so-called new remedies such as hydrastin, iridin, sanguinarin, baptistin, glonoin, gelsemin, euonymin, mucuna, muscarin, the quack chlorodyne (of which I never in my life prescribed a single dose), eucalyptin, thymol, ingluvin, asclepedin, and a host of others, the advertisements of which fill the pages of our journals, I think that some valuable plans of treatment have been allowed to fall into disuse, and that there are such things as "good remedies out of fashion."

It is not long ago that, in a very urgent case of bronchitis, I advised the administration of an emetic; when the gentleman whom I had been called to meet in consultation said, " Why, I never gave an emetic to an adult in my life." In former times, it was not unusual, on the contrary, to commence the treatment of many diseases with the administration of a dose to procure vomiting; and although the remedy might then be given, sometimes indiscriminately and according to routine, only those who have seen the effects of emetics, properly and judiciously given, can conceive the beneficial effects they sometimes produce. In the early stage of an attack of croup, it was by no means unusual to give an emetic of tartarised antimony or of ipecacuanha; and it is in accordance with the experience of some of the best authorities and most practical men, and quite consonant with my own experience too, that symptoms which presented the most certain augury of a severe attack were by these means cut short, the hoarse voice resumed its natural character, and the feverish symptoms were in a few hours relieved. I know quite well that a great fear its entertained by some as to the depressing effects of emetics; but the fear is theoretical, and not practical, and those who have had most experience in the administration of them best know how groundless the fear is. In diphtheria, too, I have seen the false membranes which are out of reach of local remedies, and which the patients cough and cough in vain, and utterly exhaust themselves to get quit of, readily brought up by the action of vomiting, to the immense relief of the sufferer.

In suffocative bronchitis, the effect of emetics is sometimes magical, and by their administration in such cases not only is immense relief given, but I verily believe—I am certain—that lives are saved. You are called to a patient who has been ill a few nays, with increasing dyspnœa; she is sitting up in the bed (I draw from nature), for to lie down is impossible; she is restless, and tossing about;

the lips, and indeed the whole face, blue; the eyes watery and staring; the pulse quick and small; the cough constant; the expectoration semi-transparent and tenacious; over every square inch of the chest, front and back, from apex to base, you find abundance of bronchi; moist, sonorous and sibilant in the upper part of the lungs, and muco-crepitant, or mucous *râles* toward the bases. Ammonia and stimulants, right and good in their way perhaps, in such a case are too slow in their action; the patient is, in fact, more or less slowly, more or less rapidly suffocating. An emetic of twenty-two grains of ipecacuanha in an ounce of water is given; in ten or fifteen minutes, the patient vomits and brings up a huge quantity of that tenacious mucus, and the whole aspect of the case is altered; the distressed countenance is relieved; the breathing is at once quieter; and the patient is able for the first time for the past twenty-four hours to lie moderately low in bed, and to get some sweet refreshing sleep. The patient is, in fact, rescued from the extremest peril, and in this case, and in many similar ones too, I believe, from otherwise most certain death. Of course, in such cases the emetic is not given for its effect on the stomach, but for its collateral effect in mechanically clearing out the enormous amount of secretion which accumulates in the bronchial tubes, and which the patient is otherwise quite incapable of getting quit of; and thus the half choking, almost asphyxiated, condition is changed for one of comparative comfort, and time is gained for the action of other appropriate remedies. No doubt the secretion may, and often will, accumulate again; and I have not hesitated again in a bad cases to repeat the same good remedy; but it is a fact, and a very positive one too, that, quite contrary to what those who have had no experience in the plan suppose, the system rallies instead of being more depressed under the action of the remedy; and, in the language of one who had had thirty years' experience in the beneficial effects of ipecacuanha in some cases of exhaustion and sinking."

THE RELIEF OF TOOTHACHE.

Dr. Kenneth W. Millican thus writes, in the *British Medical Journal*, September 1, 1883: Possibly the following may be of use. I have found it very successful. It is a modification of a method recommended by Professor Babaieff to the Caucasian Medical Society. Melt white wax or sparmaceti, two parts, and, when melted, add carbolic acid crystals, one part, and chloral hydrate crystals, two parts; stir well till dissolved. While still liquid, immerse thin layers of carbolized absorbent cotton-wool, and allow them to dry. When required for use, a small piece may be snipped off, and slightly warmed, when it can be inserted into the hollow tooth, where it will solidify The ease produced by this simple method is really very great.

THE RATIONAL TREATMENT OF DYSENTERY.

The *Med. Record*, October 20, 1883, tells us that Dr. KOBRYNER (*Bull. Gen. de Therap.*, June 15, 1883), deprecates the routine treatment of dysentery:

The proper treatment, he thinks, consists in fulfilling the indications presented by the disease, and not in the routine method, based on pure empiricism, of forcing down immense doses of ipecacuanha. There are, he argues, five special indications to be followed in the treatment of the grave forms of dysentery. The first is to rid the patient of everything that may aggravate or keep up the morbid condition. This end is to be attained first by the administration of an emetic. In the milder cases this is not necessary, as the onset of the disease is usually preceded by a longer or shorter period of general malaise, when there is but little appetite. The patient eats only a little light food, and the stomach consequently is nearly or wholly empty. In dysentery of severe type, on the contrary, especially in times of epidemic, the invasion is sudden, and the patient may be seized shortly after the ingestion of a full meal. The process of digestion is suddenly arrested, and the stomach must be relieved of its load as speedily as possible. Then the rest of the digestive tract requires attention. The intestines are filled with a quantity of fecal matter which must be got rid of. This is to be accomplished by the administration of any of the ordinary salines or laxative mineral waters. In mild cases this is all the treatment usually required. The second indication is to moderate the fever. This end Dr. Kobryner attains by a restricted diet. When the fever is high the fast must be absolute, but as soon as it begins to fall some light soup may be allowed. Solid food is not allowed until the patient is absolutely free from fever. Infants at the breast may be permitted to nurse, but must take only a little milk at a time. They should not be urged if they refuse the breast. In bottle-fed infants, milk is not allowed, but they can have only light broths and a little albumen and water. The third indication is to relieve the colic. While opium is the specific for pain, it is not to be thought of in dysentery. Notwithstanding all our efforts to unload the bowels, it often happens that hard fecal masses are expelled from time to time, and if opium is given they are retained and increase the irritation. The remedy for the colic of dysentery is calomel. In spite of its ordinary action in increasing the intestinal discharges, it relieves the pain, and, in this case, diminishes the number of the dejections. The fourth indication is to restore the blood to its normal richness. This is a most important part of the treatment, and is best accomplished by perchloride of iron in doses of eight drops per diem for nursing infants, and a proportionate amount for older patients. In addition to this may be

given a drink of white of egg in water (the whites of six or eight eggs to a quart of water). It is not until the sixth or seventh day that the signs of impoverishment of the blood become evident, so that the treatment by iron and albumen is not to be begun until that time. The last indication, which is met with in only a certain proportion of cases, is to treat the intermittent character of the symptoms. Quinine is the remedy here.

PEDIATRIC APHORISMS.

The *Obstetrical Gazette* quotes the following aphorisms of Prof. Letamendi (El Dictatem). They contain great truths and offer food for reflection and study not only to the physician but every parent.

1. Children are like the mob; they always complain with reason, although they cannot give the reason why they complain.

2. Always look at the lips of a pale and sickly child; if they are of a deep red color, beware of prescribing tonics internally. At the outset you will congratulate yourself, but in the long run you will repent of having employed them.

3. As a general rule, a sad child has an encephalic lesion; a furious child, an abdominal one; a soporific child has both, though indistinctly defined.

4. An attendance on children produces in the mind of an observant physician the conviction that the half, at least, of adult transgressors are so through morbid abdominal influences.

5. A sunny living room, a clean skin, and an ounce of castor oil in the cupboard, these are the three great points of infantile hygiene.

6. To dispute the clinical value of tracheotomy in croup is waste of time to no good purpose. Croup or no croup, if there be a positive obstruction to respiration in the larynx, it is but according to reason to open a way for sublaryngeal respiration. In the days of more knowledge and less nonsense, tracheotomy will be ranked among minor surgical operations.

7. Dentition is a true multiple pregnancy in which the uterus and its fetuses become petrified in proportion as they grow. It is not the direct or the eruptive pressure, but the lateral pressure of all together, that is the most dangerous. It is from this that so many cerebral symptoms appear which can in no way be relieved by incision of the gums. The only recourse against the danger of this transverse pressure is to give the child more nourishment, in the hope that as the general condition is bettered the local condition will also improve.

8. If the incisors of the first dentition are serrated it is bad, but if those of the second formation are the same, it is worse. It foretells a number of lesions are arising from deficiency of mineral salts in the tissues. There is one only exception, and it is an important one. When the serrated incisors are seen in strong children in whom the fontanelles have closed early, it is a sign of a robust constitution. Instead of a number of small and sharp dentitions, there are a few large blunt ones.

9. To regard the eruption of the teeth as the sole factors in the general process known as the first dentition, is to perpetrate a sort of a medical synecdoche. Children get their first teeth because they are at the same time getting a second stomach and second intestines.

10. The body of a child possesses such a degree of "acoustic transparency" that in cases of necessity or convenience auscultation may be praticed with the hand, converting it into a telephone which will reveal as much to the physician as ever his ear could do.

11. In practice it is well to distinguish with precision a case in which disease is due to lumbricoids from one in which lumbricoids are due to disease. For in the former case anthelmintics are of service, but in the latter they do harm.

12. Since, until a child is able to speak clearly, his relations with the physician are purely objective, it is very necessary that we should study as carefully as do the veterinarians the exact correspondence between lesions and the expression of the patient.

13. If you wish to cure rapidly and well joint-disease in infants, you must treat them as you would a conflagration—douches, douches, and more douches, until you have succeeded in extinguishing them.

14. The entire system of the moral relation between children and adults should be changed. To speak to them incorrectly merely because they cannot pronounce well; to excite their fears aud arouse their weird imaginations simply because they are easily frightened and impressionable; to stimulate their vanity because they are naturally inclined to be vain, these and other similar actions are not only wrong, but absurd.

15. There is finally a danger to the women of contracting a vice as yet unregistered in the annals of concupiscence—mastomania, or the sensuality of nursing. When this physiological act degenerates into vice, nursing becomes so frequent as to be nearly continuous, and the result is ruin to both mother and child. Finally, the physician must here, as always, be at once wise, discreet, of good judgment, and firm.

TREATMENT OF EARACHE.

It is said, that, by the following simple method, almost instant relief of earache is afforded: Put five drops of chloroform on a little cotton or wool in the bowl of a clay pipe, then blow the vapor through the stem into the aching ear.

KINNER: REMARKS ON OTTORHEA IN CHILDREN

(Amer. Jour. of Obstetrics, November.*)*

Purulent discharge from the ear is one of the most common symptoms of aural disease. Otorrhea comes on gradually with little pain, and although the smell from the discharge is sometimes very offensive it is frequently allowed to continue for months. As one of the causes of otorrhea we may mention catarrhal condition of the meatus and tympanum, in which inflammation may spread to the mastoid cells, and finally the brain. The prominent symptoms are rigors, tongue very furred, rapid pulse, increase of temperature, and pain and swelling of the parts around the ear, which parts assume an erysipelatous appearance. The history of an illustrative case is given in which a strumous child, aged six years, had an inflammation of the meatus and tympanum of left ear, which spread to the mastoid region, producing an abscess. This was repeated several times, when finally a polypus was discovered in the meatus, which was removed by the wire-snare. Eventually there was recovery in the mastoid region, but the membrana-tympani was perforated, and hearing destroyed. Many cases of mastoid inflammation ought not to go on to suppuration if properly treated. The plan of treatment adopted on detecting pain or tenderness over the mastoid region and around the ear is, first to paint a strong solution of nitrate of silver (ʒss to ʒ j) or several layers of equal parts of tincture iodi and lini iodi, or with pot. iodi cum sapone, having previously applied leeches if much swelling and redness exist, and subsequently follow up the treatment with warm fomentations or poultices containing a little opium. As regards the treatment of otorrhea by dry powders, the plan adopted is to cleanse and dry the ear well with a piece of cotton-wool twisted upon the end of a grooved ear probe, then with an insufflator introduce into the meatus whatever powder seems suitable for the case; a small quantity of cotton-wool is then lightly placed in the meatus to prevent the powder falling out. This treatment is renewed night and morning. The practice of stuffing the meatus with various powerful astringent powders, pushing the powder firmly in by means of some small instrument, and then closely packing with cotton, cannot be free from danger. The various powders used are boracic, tannic, and gallic acid, alum, iron-alum, copper, lead, zinc, and so forth. If the wet treatment is preferred, the various astringents may be used; boracic acid in the proportion of one drachm of the acid to an ounce of rectified spirit makes a very nice lotion, or carbolic acid and sulphate of zinc, four grains of each to an ounce of water, or a saturated solution of boracic acid in hot glycerine, or glycerite of tannic acid. The following are a few good lotions:

℞—Acid. carbol., gr. iv.
Sodæ bicarb, gr. xij.
Sodæ bibor., gr. xij.
Glycerine, ʒ ss.
Aquæ, q.s. ad. ʒ i.

Ft. lot. ad aurem

℞—Zinc oxide.
Bismuth oxid., aa gr. v.
Glycerine, ʒ ss.
Aquæ, ad. ʒ i.

In connection with the above treatment great benefit will be obtained by the use of the Politzer bag.

SANTONIN.

Dr. Lewin advises to give santonin only in solution; and shows that in that form it reaches the small intestines more surely, is not absorbed too quickly, and is more destructive to the round worm (ascaris lumbricoides) which inhabits the small intestines, than when given in any other form. He mentions several prescriptions, of which we select the two following:

℞. Santonini,..... gr. iij;
Ol. ricini, ... f. ʒ ss;
Ol. cinæ. eth., ... gtts. iv.

Sig. A teaspoonful two or three times daily or, if elastic capsules can be taken,

℞. Capsul gelatin. elast.,
Santonini,..... gr. i;
Ol. ricini,..... f. ʒ i;
Ol. cinæ. eth., ... gtt. i;
Reple., ... No. iv.

Sig. One to be taken two or three times daily.

Santonin is also useful for the long thread-worm (trichocephalus dispar.) which resides in the cecum, and the thread-worm or seat-worm (oxyuris vermicularis) which inhabits the colon and rectum; it must there also be given in oily solution, but as an injection per rectum. (*Berlin Klin Woch.*)

SOLIDIFIED CREOSOTE.

In its application to carious teeth, creosote is often inconvenient in consequence of its fluidity producing ill-effects upon the mucous membrane of the mouth. This may be obviated by giving to it a gelatinous solidity by adding ten parts of collodion to fifteen of creosote. This, besides being more manageable than liquid creosote, also closes up the orifice in the tooth, preventing the accession of the air to the dental nerve.—*Progrès Medicale.*

TREATMENT OF COLDS.

A "cold" having been contracted, what is the best means of throwing it off? The answers to the question are legion, for they are many. In domestic practice hot, stimulating drinks have from time immemorial been held to be the best, and that they are very effectual does not admit of question. Full doses of quinine and Dover's powders have, probably, a larger number of advocates in the profession than obtains for any other means. For a number of years we have, however, relied quite exclusively on the treatment recommended by Dr. Dobell, of the Royal Hospital for Diseases of the Chest, London, and have come to regard it as the most effectual of any yet suggested: 1. Give 5 grains of carbonate of ammonia and 5 minims of liquor morphia (B. P.—morphia, gr. 1-6) in an ounce of almond emulsion, every three hours. 2. At night give ʒ jss. of spts. mindererus in a tumbler of cold water, after the patient has got into bed and been covered with several extra blankets. Cold water should be drunk freely during the night when there is thirst. 3. In the morning the extra blankets should be removed, so as to allow the skin to cool down before getting up. 4. Let the patient get up as usual, and take his usual diet, but continue the ammonia and morpha mixture every four hours. 5. At bedtime the second night, give a compound colocynth pill. Usually about twelve doses of the mixture will be found sufficient, but should the catarrh show any disposition to return after leaving off the medicine for a day, another six doses may be taken and another pill at bedtime. The beauty of this treatment lies in the fact that it does not interfere with the patient's business, and does not expose him to fresh attacks of cold, which are liable to follow exposure to the outer air after a course of hot, stimulating, diaphoretic drinks.—*Medical Age.*

FISSURED NIPPLE.

Pulverized gum-arabic is recommended as a simple and safe agent for cracked nipple. Immediately after the child has sucked, the powder should be dusted over the surface and the nipple protected from the air.—*Exchange.*

SUPPOSITORIES IN PILES.

The following formula is recommended for piles:

℞ Iodoformi, ʒ i.
Balsam Peru, ʒ ii.
Ol. Theobromæ,
Ceræ alb., aa ʒ iss.
Divid. in suppos. No. 12.

Introduce on eafter each evacuation.

CLARK: A LETTER ON THE SUBJECT OF HYPODERMIC INJECTION OF MORPHIA IN INFANTILE CONVULSIONS.

(*Amer. Jour. of Obstetrics*, November.)

Three cases are reported. In the first a child of four years eight months had one-twelfth of a grain of morphia sulph. administered subcutaneously. Seeing no effect in twenty minutes, one-sixth of a grain was given in the same way. The convulsions soon ceased, but the child died in about a week of meningitis. Second case, child three years four months; one-sixth of a grain of morphia hypodermically; convulsions almost immediately ceased. The child died the next morning in another convulsion. Third case baby two months old; one-sixth of a grain of morphia hypodermically; convulsions ceased, and the baby made a good recovery. Fearing an overdose a little belladonna was administered, but the doctor thinks that in the convulsive condition an extraordinary tolerance of opium obtains. One-fourth of a grain of morphine is not too much to administer subcutaneously to a child two years old in convulsions. This will not be apt to need repeating.

HUGHSON: NOTE ON HYPODERMIC INJECTION OF MORPHIA IN CONVULSIONS OF CHILDREN.

(*Amer. Jour. of Obstetrics*, October.)

A boy, two years old, was brought by his father to the doctor's office, having been in convulsions for about an hour. Valerian, cold cloths to head, and sinapisms to back of neck and extremities were applied without avail. In a short time the child was totally unable to swallow, and appeared to be rapidly sinking into a dying condition. As a last resort about one-fifteenth of a grain of morphia sulph. was injected into his arm. In ten minutes he was quiet, and in twenty minutes was sleeping nicely. He had no return of the convulsions and made a good recovery. The doctor has determined in the future to resort to this treament in severe cases. The hypodermic use of morphia in large doses in puerperal eclampsia is believed by many surgeons to surpass the ordinary treatment by venesection, chloral, and so forth.

FOR CHAPPED HANDS AND FROSTED FEET.

Dr. Carl Seiler (*Polyclinic*, Jan. 15) calls attention to the value of tincture of benzoin in the treatment of chapped hands and frosted feet. It is applied by simply painting it on the skin. The stockings may be prevented from sticking to the feet by rubbing some oil over the benzoin.

A RELIABLE TÆNIAFUGE.

℞	Extract filicis macis,		ʒ iss,
	Pulveris kamalæ,		ʒ ij,
	Mucilaginis acaciæ,		
	Syrupi simplicis,	aa	ʒ ij,
	Aqua cinnamoni, ad,		℥ iij. M.

Sig.—Half to be taken at bed-time, and the other half early in the morning.

Mr. J. B. Lawson reports good results from this, in the *Medical Digest*.

THE CANADA MEDICAL RECORD

A Monthly Journal of Medicine and Surgery.

EDITORS:

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R. A. KENNEDY, M.A., M.D.

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MONTREAL, JAFUARY, 1885.

ADHESION OF THE OMENTUM IN ABDOMINAL SURGERY.

With ordinary care in preventing hemorrhage and in staying that which does occur adhesions of the peritoneum and of the pelvic and abdominal organs covered by it do not present any very serious obstacle to the success of the average ovariotomy, hysterectomy, etc. Still there are results of adhesive inflammation that render the removal of abdominal tumors both difficult and dangerous. We saw an illustration of this lately in the case of a patient in the Western Hospital who underwent the operation for double oophorectomy. The adherent omentum was found to cover completely the whole abdominal contents, being attached in several places low down in the pelvis. The history of the case was distinctly that of repeated attacks of local peritonitis, the enlarged and thickened apron having itself been the subject of repeated attacks of inflammation.

The possibility of this condition of things ought to be ever present in the mind of the operator, otherwise it is likely to confuse him and thus lead in his efforts to get *behind* or perhaps *through* the obstruction to dangerous lesions and serious inflammation of the vascular omentum. In his instructive article on Diseases of the Fallopian Tubes in a late number of the New York *Medical Record* Dr. Gill Wylie refers to this subject in connection with the operation for removal of diseased tubes and ovaries as follows: "Where the omentum is free from adhesion it can be pushed up as one would the end of an apron. When it is adherent, as it often is, to the broad ligament and anterior wall or top of the uterus, it cannot easily be separated by pulling it from below upwards; but by passing the two fingers well to one side and getting them underneath, and separating the adhesions, many formidable looking cases can be easily managed. As the adhesions separate they should be lifted through the opening and any bleeding points tied. If the adhesions are strong and vascular, as they may be in those cases where there have been repeated attacks of local peritonitis, then the omental adhesion can be tied off, tied as low as possible, and then a little above this, and cut between the ligatures. By pulling the sides of the abdominal opening laterally with retractors we can do this without enlarging the opening in most cases.

In handling and trying the omentum care should be taken not to split or tear it, for it will invariably bleed up in the angle of the split and may be very troublesome."

Dr. Wylie was for many years Dr. Marion Sims', assistant, and he has known that celebrated gynecologist close the abdomen rather than run the risk of going through the omentum to reach the ovaries beneath it. Although the experienced surgeon may by means of some such simple procedure as that described by Wylie remove the barrier it will readily be seen how embarrassing and how formidable such a state of things might prove to the inexperienced operator.

COCAINE CHLORIDE.

A very considerable degree of interest has been manifested by the Medical Profession in the usefulness of hydrochlorate of cocaine as a local anæsthetic.

A medical student of Vienna, named Koller, has discovered that a 2 per cent. solution of the hydrochlorate of cocaine when dropped into the eye in quantities of first 2 drops and then of 3 drops, with ten minutes interval, gave, after another ten minutes interval, an anæsthetic condition of the cornea and conjunctiva, which remained for 10 to 20 minutes and then gradually passed off.

Cocaine is the alkaloid of the leaves of a shrub (the erythroxylon coca) which grows and is cultivated in South America, especially in Peru and Bolivia.

The natives there chew the leaves, and profess to derive from them greatly increased power for physical labor. It has been used in a similar way in Canada, with a like object, and the same result. It has not yet apparently given to any one any insensibility to mental fatigue.

A poisonous dose produces death in the warm-blooded animals, who are less affected by it than the cold-blooded ones, by paralysis of the respiratory centre. Its toxic effect is small and its action not cumulative.

The installation of a 2 per cent. or a 4 per cent. solution into the eye renders the conjunctiva and cornea insensible to the knife. If, however, the incisions are to be carried much deeper, as for instance in the operation for squint, then, before dividing the muscles, the solution must be applied within the incision, when, after a few minutes interval, the operation may be completed without causing the patient any pain.

It is a mydratic, though much feebler than atropia, and its mydratic effect soon passes off. From the paleness of the conjunctiva which follows its application it would seem that it causes contraction of the conjunctival vessels.

It has also been used in gynecology to render the mucus membrane of the vagina and cervix uteri insensible to operations performed upon them, and with success.

It has been found useful in laryngeal phthisis, and in operations performed upon the mucus membrane of the nose, the membrana tympani, and the lower end of the rectum and anus.

It has also been recommended in the treatment of the morphia habit and in alcoholism. In these latter cases, a solution of the hydrochlorate has been used hypodermically.

There is certainly a very large class of cases where an agent possessing the properties attributed to the hydrochlorate of cocaine would be of very great value to both operator and patient. There are a large group of every-day cases, where the question arises, which is easiest borne, the anæsthetic or the pain of the operation without the anaesthetic? and it is in these cases particularly that cocaine may become useful.

Its use is so far limited to rapidly absorbing surfaces as mucus membranes; applied to the skin it has but little, if any, effect.

LOCAL AND GENERAL.

Littré, the author of the dictionary, is said to have so regulated his life during the thirteen years he was writing his great work as to give the least possible time "to the current requirements of existence." He rose at eight o'clock and wrote for an hour while his room was being put in order. Probably he also kept an eye on the housemaid, and saw that she did not "arrange" his books and papers so that it was impossible for him to find anything after the operation had been completed.

Then he read proof until the midday meal; wrote again from one to six, and, taking one hour for dinner, returned to work and kept it up until three o'clock in the morning, or until the allotted task was completed. Then he retired to rest, to rise at eight o'clock and repeat the routine of the previous day *ad finem*. In this way he managed to prepare 415,636 pages of manuscript.

And yet this man lived to a good old age, and nobody can say that his was not a useful life, and probably a satisfactory one to himself, even if he did not die in the odor of sanctity. Still one's intellect is forever dependent upon an organism prone to resent overwork, and I believe it to be the

duty of the physician to discourage undue mental exertion. From our ancestors, who might generally be described as a hardy race of men with great stomachs and no brains, we are developing into a physically inferior race with large brains and irritable digestive apparatus.

A judicious exercise of mind and body should be the aim of the man who would make the most of himself. As I write there is too much athletics in the air, but doubtless it may do good by enticing the bookworm from his books and by making the pale student breathe the cold, exhilarating air and exercise his flabby muscles. At any rate, if we must have an extreme in Canada, by all means let us raise muscular, eupeptic, broad-chested, good-natured samples of Anglo-Saxon mediocrity, rather than dyspeptic, myopic, anæmic geniuses, with abnormal brains and endless stores of knowledge.

The *Popular Science Monthly* indirectly touches upon this subject when it refers to the action of the American Council of Education in the matter of school recesses.

The committee appointed to report upon the subject, summed up the *pros* and *cons* as follows : The opponents of the recess claim that the adoption of their measure will conserve the health of pupils by preventing exposure ; that it will tend to refinement by removing opportunities for rude behavior and boisterous play ; that it will take away the opportunity for association with the vicious and consequent corruption of morals, and that it will make things easier for the teachers. The report replies to these allegations in this style, an answer which most of us will, I think, believe to be ample : exposure to the weather during recess is beneficial, not hurtful : it gives a change from the close, foul air of the school room to the free air, with opportunity to relieve physical wants, and affords a means of ventilating the schoolroom without chilling the scholars ; that the "rude and boisterous play" of recess is only a rehearsal of what is indulged in outside of the schoolroom, with the advantage that the teacher is present to prevent excess, and that it gives needed exercise ; that moral corruption is not generated in the open practice of recess, but in secret intercourse ; and that the teacher's office is not to make things easy for himself, but by every means in his power to promote the well-being of his pupils.

Prof. Austin Flint's admirable address on "Medicinal and Non-Medicinal Therapeutic" has been widely copied and much extolled, but it appears to me that much of the material of the address can be shown to have been derived from well-known sources.

For example, his denunciation of that domestic superstition commonly called "catching cold" is almost an exact reproduction of Felix Oswald's ideas upon the subject. I have not the latter author's "Physical Education" before me nor all of his papers on "Remedial Education" (*vide Popular Science Monthly*, 1883 and 1884) but I know that it will be found in either or both of the places indicated. At any rate Dr. Flint's address is but an indication of the return all along the line of surgery and medicine to "natural" therapeutics ; already hygienic precautions and the common-sense pharmacopeia bid fair to take the place of a blind faith in the efficacy of drugs. In the meantime the cool-headed doctor will neither be a partisan of men like Bartholow, "the drug worshipper," nor a follower of "drug despisers," like Dr. Oswald. It is well to recognize the value of such pharmacopeial preparations that have stood the test of time and experience, giving them only when necessary, and refusing at the same time to dose a patient because some enthusiast has declared that miracles have been wrought thereby.

Peculiarly difficult is it, it appears to me, to place anything like a proper value on proposed remedies about which there has not been for years a concensus of approval. Temporary enthusiasm should not count for much with those who have not an opportunity to judge for themselves in hospital practice or elsewhere. Wait a year or so. All of us will remember the contrast between the predictions and results in the case of croton-chloral-hydrate, nitrite of amyl, bromoform, cundeango, electricity, salicylic acid, the antiseptic spray, and other remedies too numerous to recount. Of course this is true of other things besides medicine ; it is only a fair sample of the tendency of human mind to run to extremes.

No ; cocaine hydrochlorate, muriate. or more properly *chloride* ($C_{17}H_{24}NO_4CL$), has nothing to do with that edible substance called *cocoa* or chocolate. The latter is derived from the bean of the *theobroma cocoa ;* the former is a salt of a rare and expensive alkaloid (present value $5,000 per pound) obtained from the leaves of *erythroxylon coca*, a native of Peru and Bolivia. This is the plant about which such remarkable stories have been told regarding its tonic and stimulating properties—how the natives can travel for days without either food or sleep by simply chewing the leaves. The alkaloid is the active principle of the plant, and until recently was considered as a chemical curiosity. The chloride is not the only anæsthetic salt, as the citrate has lately been employed by German dentists for "preparing" sensitive teeth before filling them. It is made into small pellets which are wrapped in wadding and placed in the hollow of the tooth. All sensation is soon destroyed, and the tooth can easily be cleaned out and filled without pain.

P. A. LAVER, M.D.

MONTREAL, January 15, 1885.

PERSONAL.

The Hon. Dr. Robitaille, ex-Lieutenant-Governor of the Province of Quebec, has been nominated a Dominion Senator, in place of his brother, who has resigned.

The Hon. Dr. Ross, Premier of the Province of Quebec, had recently a large public dinner given to him at Three Rivers by his political friends.

Dr. Roddick, one of the editors of the *Canada Medical and Surgical Journal*, Montreal, who was quite unwell recently, is, we are glad to say, once more able to return to active work.

Dr. J. Brodie, formerly Demonstrator of Anatomy in Bishop's College, who has been practising in Honolulu since his removal from Montreal, about five years ago, has lately taken unto himself a wife from among the fair daughters of California. Dr. Brodie has a large and remunerative practice in his Pacific home. We wish the doctor and his wife success and happiness in all their undertakings.

Dr. A. A. Browne, Professor of Midwifery in McGill University, has resumed his lectures, having recovered from the illness which confined him to the house for a short time.

Dr. Godfroi Dubuc (C.M., M.D., Bishop's, 1872), of Sutton Flats, Que., has removed to Chicopee Falls, Mass.

Dr. Osler, of Philadelphia, late of Montreal, visited his friends here during his Christmas vacation. We dropped in upon him at his new home in Philadelphia, while in that city for a day, the middle of this month, and received a cordial welcome.

Dr. Gerald Howard, son of Dr. R. P. Howard, Montreal, has successfully passed the examination for the Fellowship of the Royal College of Physicians, London.

Dr. Colin Sewell, of Quebec, who has been seriously ill, is, we are pleased to learn, now quite convalescent.

REVIEWS.

A Practical Treatise on Diseases in Children. By EUSTACE SMITH, M.D. New York: Wm. Wood & Co.

Dr. Smith has written this book in a careful and concise manner, discussing the whole subject of disease in children. From his large experience he has been able to dwell upon the clinical features to be observed, and thereby has produced a work valuable on the diagnosis and treatment of infantile disorders. Prominence has been given to the diet and hygiene required. The physician will find a perusal of the contents valuable and instructive.

A Manual of Obstetrics. By E. L. PARTRIDGE, M.D., with sixty illustrations. New York: Wm. Wood & Co.

The author in attempting to outline the knowledge of obstetrics in this very small manual has certainly accomplished his aim. It is very concise, yet not at all obscure. Such manuals can only refresh the memory, for which purpose they are intended, and from this point of view we can recommend it as a book to be slipped into the pocket of the practitioner whose time does not permit a careful study of more extensive textbooks.

THE CANADA MEDICAL RECORD.

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SYCOSIS AND ALLIED AFFECTIONS;

By CASEY A. WOOD, M.D.,

Professor of Pathology Medical Faculty University of Bishop's College, Attending Physician Western Hospital.

(Read before the Montreal Medico-Chirurgical Society.)

There are few medical terms which have undergone such little change in definition as sycosis. In the therapeutical classification of skin diseases adopted by Celsus it was included among those local diseases amenable to treatment by medicine, and was defined to be a tuberculated eruption on the hairy parts of the face. For Celsus, good Roman though he was, adopted the Greek name of the affection, which Erasmus Wilson refers to group "Objective" division or sub-group "Figure" in an attempted classification of the terms employed by Hippocrates and probably by Æsculapius.

And, broadly speaking, any disease affecting the hair and hair-follicles of the face is now also called sycosis.

It is true that a well-educated practitioner would not stop at satisfying himself that he had a case of capillary folliculitis—he would enquire further as to the cause and nature of the inflammatory change; and it is also true that in late years the various pathological processes that manifest themselves in the different parts of the hair and its follicle are well defined, but the very difference in the nomenclature adopted by different dermatologists do not seem to have altered the general meaning of the word as accepted by Celsus, and perhaps by Hippocrates.

In 1854 Erasmus Wilson called sycosis a form of "acne" and in 1871 he describes it as including several varieties and degrees of disease. Squire, in Reynold's System, confines the term to that "disease of the hairy parts of the face caused by the presence in the root sheath of *microsporon mentagrophytes*." Liveing speaks of sycosis as a non-contagious disease of the hairy face which is neither eczema nor acne nor a syphilide. He also takes a liberty with the term, and defines S. parasitica as the result of the ravages in the hair of the face of the *tricophyton tonsurans*. Pifford does the same; while George Henry Fox thinks that, though sycosis is a term which is loosely applied to nearly every affection of the bearded portion of the face, its use ought to be restricted to that inflammatory condition of the hair follicles and adjacent cellular tissue which is characterized by pustules perforated by hairs which in time become so loosened that they can be extracted by the gentlest traction of the epilatory forceps. Bateman and Bristowe follow the definition of Erasmus Wilson, while, in his Practice of Medicine, Roberts, speaking of sycosis as an inflammation of the hair follicles and sebaceous glands, says the condition may be brought about by various causes.

Without further multiplying authorities I think I have shown that I am justified, in the absence of agreement among authorities, in defining sycosis to be any disease of the hairy face affecting the root sheaths or follicles, which gives rise to induration and swelling of the interfollicular tissues. In this category, excluding the syphilides and lupus, are included at least three, and possibly four, distinct

affections—the best argument that could be adduced for dropping the term altogether, viz., pustular eczema, tricophytos is barbae, acne indurata and, it may be, sycosis proper. None of these diseases is common about the bearded face, and I can speak very diffidently about them from practical experience. Of the first, which is the commonest, and probably most important, viz., eczema pustulosum facei, I had a chance ten years ago to study a well-marked case. E. M., aged 35, was accustomed to be shaved regularly every second day, but was interrupted in the operation by observing on the left side of his chin a reddened nodule, that was not painful, but which discharged a thin fluid. From this point the disease spread over his chin, and gradually involved the most of one side and part of the other side of the face that had been covered with hair. When I saw him the chin and part of face were covered by dark crusts of half-dried discharge over-spreading nodular pustules. There was a good deal of itching and burning and to relieve this he was tempted to rub and otherwise irritate the disease patches. He had eczema of one eye-brow and a few pustular spots on the upper lip. When I last saw him he had greatly improved under treatment. When eczema involves the region of the mustache and beard in the male adult it extends to the follicular lining, increased secretion at once occurs, pus forms, and the follicle is converted into a small abscess cavity through the mouth of which the hair projects. The hairs in this way become loosened, and when closely examined are found to present an appearance which is almost characteristic of the disease, viz., each hair pierces a collection of pus which is either aggregated as a distinct white pustule or which, as it discharges from the mouth of the follicle, is often discolored by blood. These hairs are extracted without much pain. The diagnosis of the disease rests mainly upon the well-known character of eczema wherever it occurs. It usually extends to other parts of the face, is attended by burning, redness and itching, and the epilated surface is shortly covered by an eruption, scaly it may be, but always moist. In doubt the microscope.

Here, probably, is the proper place to discuss the question as to whether there exists a sycosis which is neither eczema nor acne nor a trichophytosis nor a syphilide nor a lupoid dermatites, whether, in other words, there is a disease of the bearded face which should in the words of G. H. Fox "alone be called sycosis, and which is that inflammatory condition of the hair follicles and adjacent tissue which is characterized by pustules perforated by hairs which in time become so loosened that they can be easily and painlessly extracted by the forceps." Liveing also considers sycosis to be synonymous with *acne mentagra*, and gives the differential diagnosis between it and pustular eczema. "We must bear in mind," he says, that pustular eczema is attended with more itching and general inflammation, while the discharge and crusts are more abundant than in sycosis."

In the absence, however, of any agreement as to the precise symptoms of this so-called distinct affection; when one author tells us that it may affect the pubes, axillæ and other hairy parts, when another assures us that it may be accompanied by some pain, a good deal of burning and some itching, and a third asserts that it is frequently accompanied by the moist patches of eczema, and that eczema may give rise to sycosis and when, finally, we know that eczema may simulate almost every form and variety of cutaneous disease, the likelihood that most of us will be able to decide between these dermatologists and those that deny the distinct character of sycosis is indeed small. Furthermore, as the treatment of pustular eczema as laid down by the latter class is almost identical with that proposed for sycosis by the former, the question does not appear to me to be of great practical importance.

There can be no doubt but that the pustulo tubercular form of acne when it affects the bearded face has often been considered as a sycosis. And inasmuch as *acne indurata*, occurring in this situation comes readily within the definition of the term previously given it may legitimately be considered as a true sycosis. It is a non-specific, inflammatory, reflex irritative disease of the sebaceous glands, and in the more aggravated forms presents the fig-like, lumpy pustules, tubercles and crusts of sycosis. As Wilson says, the condition "is the protest of the fifth pair of nerves against ill-treatment received by the gastric portion of the eighth." To distinguish this from the other forms of sycosis it may be sufficient to observe, that the skin between the eruption of acne on the hairy face is bright red, tender and dry; that it is nearly always accompanied by and is the result of gastric irritability, and that each nodule or abscess corresponds very closely to the opening of a sebaceous follicle, and that, finally, either come

dones or acne vulgaris is also to be found on other parts of the face or between the shoulders.

A second form of sycosis is that disease of the hairy parts of the face in adult males due to the lodgment and development in that particular situation of *trichophyton tonsurans*. It appears upon the upper lip, chin, temples and cheeks. When the parasite proceeds slowly the hairs, follicles and skin are but little affected, but when the hair is abundant and the microphytic organism active it makes sad havoc of the beard and leaves nothing but a bushy stubble. The patch extends at its periphery, and other and similar patches may appear, and if these coalesce the typical circuneate form of the disease may be modified. In fact ringworm of the beard resembles ringworm of the scalp, and proceeds as it would in any other part of the body where the hair is unusually abundant. When the disease lasts for any great length of time the presence of the parasite sets up folliculitis and even cellulitis, which are productive of the tubercules and small abscesses so characteristic of sycosis. These local lesions so closely resemble those present in pustular eczema that the detection of the tricophyton by the microscope is the only sure method of diagnosis.

Gruby, in 1842, discovered this fungus which, according to Zeigler, belongs to the achlorophyllons thallophytes, group hyphomycetes. When it attacks the beard the fungus is found not only in the hair but in the follicle, and probably develops from the mycelium, whose favorite seat is the sheath of the hair. The spores of the plant are exceedingly small, about the $\frac{1}{5000}$ in, in diameter, and they are the active agent in transmitting the disease from one individual to another. After it has gained a lodgment in the follicle it invades the root of the hair, separating its fine fibres by mechanical pressure until it is rendered brittle and finally breaks off, leaving a ragged stump which protrudes from the inflamed and dilated follicle. If examined by the microscope, the minute spores may be detected either in groups or strung together into a kind of chaplet. Trichophytosis barbæ is the only contagious form of sycosis, and is commonly contracted in the barber's shop, hence the term "barber's itch" indiscriminately applied by the laity to all forms of sycosis. The popular idea is that it arises from the use of an unclean razor, but Fox thinks it is most likely conveyed to the exposed hair follicle by a damp, soiled towel which furnishes a capital nidus for the growth of such a vegetable parasite. The disease is rare in this country but is said to be common in France. The case which I present to you to-night is probably parasitic in its nature. Owing to prompt treatment by epilation and parasiticides but very slight traces of the tricophyton have been discovered. It began in one or two round patches which shortly developed into painless lumpy masses discharging a thin sero-pus. From these as a centre the disease gradually extended over the cheek. Under treatment the patch has greatly improved until it now presents a reddened scaly surface through which new hairs are growing up. There has never been any pain, burning, or itching nor any moist patches about the face. I was consulted last year by an elderly man for a skin disease of the right temple and cheek, which were covered by a reddened, shiny cicatrix shedded here and there with a few unhealthy hairs. From the history of the trouble, which he told me originated many years before, I have no doubt I had to deal with an old and neglected trichopytosis barbae. That it is of great moment to discover the precise cause of the sycosis in a given case goes without saying. It simply means that we must decide whether we have to treat a ringworm, an acne, or a tubercular eczema. I am convinced that as far as sycosis parasitica is concerned that the failure to improve it at once and to cure it eventually is due to neglect in carrying out thorough and persistent epilation. Not only should every diseased hair be extracted but every new one should be treated in like manner. In practising extraction in old cases I would advise the operator to use a magnifying glass and small epilatory forceps and to grasp the hair as close to the skin as possible. The tricophytic parasite extends its ravages a sixteenth to an eighth of an inch above the level of the skin. If now the hair shaft be grasped very low down the root will be more likely to come away than if it be seized high up, as in the latter case it is almost certain to break off at the diseased point. In the early stages this does not so much matter since, unlike the course of the fungus in other hairy situations, the root sheath and the intra follicular contents are usually the first to suffer in parasitic sycosis. In these short notes I have said little or nothing about the prognosis and treatmen. of the different affections loosely called sycosis for the simple reason that I having nothing new to offer, Of

greater moment it seems to me is it to decide what sort of sycosis one has to deal with, because the prognosis and therapeusis of the case follow at once upon that, and also to settle if possible the debated question as to whether the sycosis of Liveing & Fox be a veritable entity or not. If I might be allowed to venture an opinion I should say that I do not think it exists and that a sycosis which is not an eczema or an acne is parasitic in its nature, and that a sycosis which is clearly non-contagious is either a severe local acne or some modification of pustular eczema.

MONTREAL, October 5, 1884.

GYNÆCOLOGICAL REPORT.

By E. H. TRENHOLME, M.D., Prof. Gynæcology University of Bishop's College.

Dr. Hoffman of Berlin, in a late report upon the progress of Gynæcology in Germany, speaks very favorably of the *running* suture employed by Schede of Hamburg—the cat-gut is prepared by immersion for 12 hours in a sublimate solution of 1-2 : 1,000, it is then soaked in juniper oil, by which it acquires great flexibility and strength. In several post-mortem cases the suture has been found firm and even after seven days. This running suture has been used in complicated plastic operations on the perineum and vagina with excellent results. Prof. Schroeder has used the same suture in closing intra-abdominal sacs in complicated laparotomies.

The advantages of this suture are so apparent that doubtless hereafter it will be a favorite mode of co-apting divided surfaces, both in gynæcological and general surgical practice. This form of suture was suggested to his class by Dr. Trenholme more than a year ago, although he did not employ it himself.

HYDRASTAS CANADENSIS.

Attention has been directed by the German Gynæcological Society to the valuable therapeutical value of this drug, prepared by Park, Davis & Co., of Detroit.

Prof. Schatz has tested its action, which he finds is exerted upon the mucous membrane, exciting their vessels to contract. In the female generative organs it diminishes the blood supply of the mucous membrane. It is found to act favorably in cases where ergot fails.

In metrorrhagias due to myomata, in hemorrhages in the purpureum, in metrorrhagias of young persons, from 15 to 18 years of age, and in those forms of endometritis where the curette has failed, its action has brought about favorable results.

In most cases the drug was used about a week before menstruation began, and the dose employed was 20 drops three times a day.

Boro-Glyceride.

Dr. W. Thornton Parker, of Morristown, N. J., strongly recommends boro-glyceride in the local treatment of vaginitis, leucorrhea, etc. Dr. P. prefers it to the sulpho-carbolate of zinc. It acts gently and efficaciously. The preparation manufactured by Messrs. Thurdon, Metcalf & Co., of Boston, is that which he uses and commends to others. A simple mixture of borax and glycerine does not yield the same satisfactory results.

INTRA-UTERINE TREATMENT.

Bandl (of Vienna) at the same meeting gave a paper upon this subject.

In cases of sterility where we can detect no alterations to account for it, he advises to draw down the uterus with tenaculum to about two fingers' breadth of the introitus vaginæ. This, of course, cannot be attempted if there is inflammation of the uterus or its adnexa, nor if the attempt gives rise to much pain.

Dr. B. claims for his method fuller and more certain information as to condition of the mucosa, and its canal, while at the same time it is less disagreeable to the patient.

The sound used in this way enables us to determine the extent upward to which the disease extends. By examining (first clearing the cervix of mucus) if we find the sound is stained by secretion, we know that catarrh of the body (as well as of cervix) exists. Hemorrhages can be determined in the same way. It is also to be noted that gentle movements of the sound do not cause hemorrhage if the mucous membrane is in a healthy state. Of course no examination should be made shortly before or after menstruation.

The cause and seat of a menorrhagia can be recognized in this way with certainty. Dr. B.'s method of employing intra-uterine treatment is as follows: Place patient on her back and the neck of the uterus is engaged in a tubular, or Sim's speculum, when it is seized with a slender long-stem tenaculum, inserted about ½ c. m. above this, as the uterus is then gently drawn down and the speculum removed and replaced by a shorter

one, obliquely cut, the posterior limb being 9 c. m, and the anterior 7 c. m. In this way liquid applications can be made to the inner surface of the uterus, while it at the same time facilitates the use of the curette or other instruments. The use of the curette is chiefly confined to cases of menorrhagia or irregular hemorrhage which occur after labor or miscarriage. The curette removes any small portions of adherent decidua and favors the return of the uterus to its normal condition. The curette employed is generally a dull one, 4 m. m. broad and without previous dilatation of the canal. Before curetting a 5 per cent. solution of carbolic acid is poured into the speculum, and the curette passed into the canal through the fluid. Some of the fluid enters the uterus with each introduction of the curette, and causes the organ to contract. It causes no pain. In the treatment of chronic cervical or uterine catarrh, Dr. B. pours into the speculum a 10 per cent. solution of copper sulphate, and through this is passed into canal or cavity of the uterus a silver canula 4 to 6 m. m. thick, perforated at the sides and point, and moved slowly to and fro several times. Should the canula be too large for the canal, some slight hemorrhage may occur after the operation.

In cervical catarrh it is not always necessary to draw down the uterus. Any form of speculum may be used, but it must be borne in mind that the axis of the uterus must be brought into the axis of the cervix to allow of the introduction of the canula.

Correspondence.

OUR NEW YORK LETTER—THE POLYCLINIC AND THE POST GRADUATE SCHOOLS.

There are three ways open to a post-graduate medical student who wishes to add to his store of professional knowledge. He may, in the first place, matriculate at either or all of the principal medical schools, viz.: the College of Physicians and Surgeons, Bellevue, or the University of New York. By so doing he can attend at the College of Physicians and Surgeons the lectures of such men as Prof. Francis Delafield and his very instructive Thursday medical clinic. On Fridays Prof. Thomas gives clinic on diseases of women, and he will then receive his due proportion of invitations to see the Professor's ovariotomies. He can attend Prof. Jacob's clinics on diseases of children. He will be invited to the operations of Drs. Sands, Wier and Bull, at the New York Hospital, and may attend any or all of the lectures of the college. At Bellevue a matriculation ticket only admits the holder to the clinics of that school. Perhaps the most interesting of these are Prof. Joneway's nervous clinic, and Prof. Flint's medical clinic. Prof. Key's operations for stone are well worth seeing, while the surgical clinics of Profs. Bryan and Dennis and Dr. McBurney are full of instruction. At the University Dr. Loomis is the chief attraction. These tickets also admit the holders to Blockwell's Island, to the venereal clinics. The tickets cost but five dollars each, which makes the plan a very economical one. In connection with this, or alone, private instruction can be procured at an expense of from ten to twenty dollars a month for each course of an hour or two a day, three days each week. Dr. Heitsman conducts a course on Histology and Pathology at his private school. This is a thorough course in every respect, as is also the course on the same subjects given by Dr. Pruden at the College of Physicians and Surgeons. A course on physical diagnosis, etc., in the wards of Bellevue hospital by Prof. Joneway is, and should be, much sought for. Dr. Putzel gives a course of instruction on nervous diseases in the out-door department of Bellevue also. Dr. A. A. Smith lectures on physical diagnosis at the same place; and the courses on operative surgery, of Profs. Bryan and Dennis, are open to any one, whether he be connected or not with the school in which they hold honorable chairs. Dr. Mittendorf, who is connected with the Thirteenth Street Eye and Ear Infirmary, gives a course on ophthalmology and otology, which is very thorough, and embracing as it does such eminent instructors as Dr. Derby and Dr. Loring of ophthalmiscopic fame. Dr. Bosworth used to, and I believe still does, give a course on diseases of the nose and throat at the out-door department of Bellevue. These courses are all given by good men, and have their advantages and their disadvantages as I shall point out further on. The last and most popular system of post-graduate study is given at the recently organized schools, viz.: The Post Graduate School and the Polyclinic. The establishment of these schools mark the beginning of a new era in post-graduate study.

Everything else being equal, the benefit derived from a clinical lecture is in direct ratio to the number instructed. This is doubly true when applied to such studies as diseases of the eye, ear,

nose, throat, etc., where not only close inspection is necessary but instruments which aid the eye are required, and in those other departments of physical diagnosis where the training of the ear is of so much importance. It is also true in gynecology where the sense of touch must be educated. Of course at the regular undergraduate medical schools no such training is possible.

It is by the private courses that the personal teaching and the training of the senses are best accomplished, and but for one drawback this would be the ideal plan. But this drawback is a fatal one to the busy physician who wishes to "steal a while away from every cumbering care," and derive the greatest amount of benefit in the least possible time. The difficulty is this: every course which I have thus incidentally spoken of, with one exception, *is given at the same hour of the day*. The Post Graduate scholars, on the other hand, have, as far as possible, obviated this by thoroughly systematizing the different studies, so that every hour of the day, and, if desired, several hours of the night can be utilized. Between the Polyclinic and the Post Graduate it is very difficult even for one who has attended both to make a choice. The Polyclinic has the greater amount of clinical material, which is of course a great advantage. It also has the larger class of students, which is a disadvantage. The Polyclinic is a purely clinical school while the Post Graduate has a few didactic lectures. The anatomy and physiology of the nervous system are taught in a very thorough and learned manner by Prof. Spitzka, who is an authority on these subjects. Dr. Ronney delivers a very practical course of lectures on the applied anatomy of the nervous system, which consists, for the most part, of the localization of brain lesions and of lesions of the cord. These courses, taken in connection with the clinical lectures held by Prof. W. A. Hammond and Dr. Dana, make the course on nervous diseases at the Post Graduate a very desirable one. The course on diseases of children has very able exponents at the Post Graduate, but I think that Prof. Riply of the Polyclinic is a more practical instructor, inasmuch as he dwells more on the diseases which are encountered by every physician, while the instructors at the Post Graduate delight most in the diseases which we read about but rarely see.

The course on diseases of the eye and ear at the Post Graduate school cannot be excelled. Prof. Roosa is a teacher of rare ability, and his clinics at the Manhattan Eye and Ear Hospital will be remembered with feelings of pleasure by all who have participated in them. This I say without detracting anything from the same course in the Polyclinic.

It is at these schools that the student of Gynecology is led to exclaim:

> "This is the way I long have sought
> And mourned because I found it not."

By taking out the course of gynecology at both schools almost the entire day may be spent at the clinics of the most eminent men of the country and in attending the operations at the Women's Hospital and other hospitals. It is said that a poet must be born, not made, and it may also be said that a teacher must be born and not made. If ever a man was born a teacher Dr. Dawson, Prof. of Gynecology at the Post Graduate School is that man. Only five years ago little but didactic teaching was afforded to the majority of physicians, and to-day it is in this city one of the most thoroughly taught specialties in a clinical way with which we have to deal. Dr. Thomas, Dr. Emmet, Dr. Mundi, Dr. Hunter, Dr. Skein, and a host of lesser lights, are engaged at these schools as instructors, and there is no dearth of material with which to demonstrate every known disease. In future I may go more into detail on other branches.

W. P. S.

226 East 20th St., New York.
January, 1885.

Progress of Science.

AN ADDRESS IN OBSTETRICS AND GYNECOLOGY.

Delivered at the First Annual Meeting of the New York State Medical Association, November 19, 1884.

By T. GAILLARD THOMAS, M.D.,
Clinical Professor of Diseases of Women in the College of Physicians and Surgeons, New York.

MR. PRESIDENT AND GENTLEMEN—FELLOWS OF THE NEW YORK STATE MEDICAL ASSOCIATION: If I interpret aright your wishes in requesting from me an address on obstetrics and gynecology on the occasion which brings you together in this city to-day, you desire, at the hands of one who has paid more attention to these subjects than the general reader and practitioner, an estimate from his standpoint of the present status of these departments of medicine, their relations to other branches, the advances which the past decade has

accomplished for them, and the most signal lines of progress which have been pursued in the accomplishment of such advancement. If my conception of your wishes is correct, my task will not prove a difficult one, nor shall I be forced to weary you with prolix and uninteresting details.

Pardon a passing reference to the infancy of the science of obstetrics, which will serve merely to remind you of facts which you know as well as I do. Obstetrics as an art must always have existed, even among savage nations, and as civilization and refinement have increased, this art has become ever more and more perfect, keeping pace, as other arts have done, with the general advance in a people's knowledge. And thus it is that obstetrics, advancing from the ages of the past, from the period of the wonderful old man of Cos to that of Smellie and Levret, existed as a very perfect art indeed. But it was in no wise a science. He who was to elevate it to this high sphere was found in the person of the great Englishman, William Hunter, whose admirable work upon the gravid uterus did for this department of medicine what the eminent labors of Euclid did for mathematics and which exists to-day as a valuable part of the library of every intelligent practitioner of midwifery.

From that time to the present a steady advance has been made, and in our day we see the reproach which once upon a time, and that not so very long ago, attached to the "man midwife" entirely wiped away.

But all this has often been written of: let me leap over the wide chasm which divides two centuries from each other and speak of those improvements in this hundred-year-old science to which the past decade has given birth.

With how little pomp and parade are the greatest discoveries of science usually heralded! Who could have pictured to himself the wonderful results which were to follow the crude experiments of Count Rumford with steam; the watching of the swaying of a set of church lamps by Galileo; Newton's study under the apple-tree; or the flying of a Yankee printer's kite upon Boston Common? Yet the world has trembled and swayed under the result of these things, and mankind has felt their influence in every fibre and atom! In my judgment, one of the greatest achievements of modern pathology has been the discovery of the agency of certain lowly-organized monads, micrococci, and microzymes, classed under the head of bacteria, in the production of septicæmia, pyæmia, and the long list of diseases which are their outcome. These atomic bodies, floating in the atmosphere, clinging to sponges and towels, and adhering to instruments and fingers, enter the blood through the open mouths of abraded surfaces. The prevention of the evil consequences of such entrance by the plans of Lister has accomplished a great deal for general surgery. Applied to obstetrics and gynecological surgery, the same methods are found to be fully as successfnl.

Progressive obstetricians are now pretty well agreed that the diseases which follow childbirth are due, for the most part, to the introduction of some contagium or poisonous element from without, through the open mouths of exposed bloodvessels laid bare by the parturient process, somewhere between the fundus uteri and the vulva. This theory once being accepted, it follows, as a natural deduction, that every means in the power of the obstetrician should be adopted for the prevention of the introduction of the morbific agents.

Even although the obstetricians of to-day are not prepared to make aseptic midwifery a rule wherever that art is practised, it is highly probable that in the very near future this position will be accepted. Even now this method, in modified form, is exerting a beneficial influence and steadily working its way to adoption, in spite of the fact that it entails a good deal of trouble on the practitioner. That it can do no harm is quite evident. Does any man, can any conscientious obstetrician, maintain that strict cleanliness and the most scrupulous avoidance, so far as it lies in his power, of all things which can possibly admit of the entrance of the agents which in all probability produce puerperal septicæmia, will do any harm in the lying-in chamber? Supposing that only one life is saved out of a hundred deliveries, will any one assert that the saving of this one life would not repay him for the trouble which his preventive precautions have cost him? If the whole theory of the bacterial origin of puerperal fever is false, then in a quarter of century from now all precautionary measures will disappear and the old *régime* will triumph. But if, perchance, this theory is valid and true, then no human power will prevent the realization of the prophecy that aseptic midwifery will be a rule as strict, as inviolable, and as obligatory as the aseptic surgery of amputations and of laparotomy is to-day. Look at the surgery of London, of Paris, of Vienna and of New York of twenty years ago, with its unclean hands, its fatally dirty instruments, its death-laden sponges, and its foul air, with its terrible mortality, and then look at the surgery of those same cities to-day; and he will be a bold man who dares gainsay the statement that in another quarter of a century no one will venture to rise in a scientific body and declare that any efforts at perfect cleanliness in the lying-in room are superfluous or absurd.

To free the parturient act from the dangers of septic poisoning, to prevent that scourge, the so-called puerperal fever, suppurative arthritis, pyæmia, embolism, and septic inflammation of the lung, liver, and other organs, would be to save millions of lives in every generation, and to raise the science of obstetrics to an enviable height.

The germ theory has done more for obstetric medicine than what I have here alluded to. It has revolutionized the treatment of that variety of septicæmia which has been called puerperal fever. No longer do we depend in the treatment of this affection upon quinine, opium, and the application of emollients over the abdomen. By intrauterine injections the cavity of the uterus is thoroughly and repeatedly washed out with solutions of the bichloride of mercury 1 to 2000, or with a two and a half per cent. solution of carbolic acid. Surely no one who has experience in the new and the old methods will cavil at my statement that a great improvement has been effected by the former.

Were I called upon to sum up the treatment of a *declared undoubted* case of puerperal septicæmia, marked by the usual symptoms of pulse of 120, temperature 105° or 106°, which would meet the requirements of our time, I should give it categorically thus:

1. Quiet all pain by morphia hypodermically.
2. Wash out the uterine cavity with antiseptics.
3. Lower the temperature at once below a hundred, not by the barbarous method of the cold bath, but by the far better one of the coil of running water.
4. Feed the patient upon milk and nothing else, unless some good reason exists for changing it.
5. Exclude from her room all except the nurse and doctor, keeping her as quiet as possible.

Although the subject of extra-uterine pregnancy has attracted attention from the earliest days of medicine, it is only of late years that it has been carefully studied, its diagonsis put upon a firm basis, and its treatment systematized. Laparotomy, with its wonderfully beneficent results, has been brought to bear upon these cases before and even after rupture of the vicarious fœtal nest. By this procedure Jessup, of England, has succeeded in delivering at full term a child developed in the peritoneal cavity and saving at the same time the mother; and by it Tait, of the same country, has saved four women after the fœtal sac has ruptured. But it is to the fœticide powers of the electric current, first used by Allen, of Philadelphia, and then by Landis and Reeve, that the safety of such cases can best be trusted. This method is harmless to the mother, even if an incorrect diagnosis be made, and effectual in producing fœtal death if the diagnosis be correct. The number of lives which have already been thus saved is quite large, and is daily increasing. And these are lives which in former times would have been sacrificed to inattention, or want of power in diagnosis, or a lack of reliable remedial measures, even if diagnosis were rendered pretty certain.

It must not be supposed that in the olden time no cases of extra-uterine pregnancy were saved. In making my statement I allude only to the systematic management of cases in their early periods, both as to diagnosis and treatment. In this country, even as early as 1759, Dr. John Bard successfully performed gastrotomy for the removal of a fully-grown child from the peritoneal cavity. Dr. Baynham did so twice—once in 1791 and again in 1799; and Dr. John King, of Edisto Island, South Carolina, in 1816, cut through the vagina at full term, applied the forceps through opening, and safely delivered a slave woman of a child which was developed in an abdominal pregnancy. But at that time, and long afterward—until our own times, I may say—the early diagnosis and early treatment of tubal pregnancy were found to be impossible. To-day, given a woman whose symptoms of pregnancy are irregular, who suffers pain in one iliac fossa, who has sudden gushes of blood. and who is subject to occasional attacks of faintness, and every intelligent practitioner would at once examine with reference to the existence of ectopic gestation, and, discovering it, would promptly proceed to destroy the fœtus in its false uterus.

Some one has very pithily said of late that the medicine of a hundred years hence will consist chiefly of prophylaxis and surgery. It appears to me that the statement, which has more than one grain of truth in it, applies with great force to our subject of to-day. The day is, I feel sure, not far distant when preventive measures will be applied with a most triumphant result to placenta prævia, puerperal nephritis, placental apnœa, contracted pelvis, the obstinate, and often fatal, vomiting of pregnancy, and that extreme hydræmia which so often results in thrombosis.

Obstetricians are beginning to question themselves as to whether it is wiser, in the interests of both child and mother, to wait and watch during the last two months of pregnancy until a sudden and furious hemorrhage makes an issue unavoidable in placenta prævia, a convulsion announces the point of tolerance in puerperal uræmia, or the cessation of fœtal movement tells the tale that the crippled intra-uterine lung has ceased to have power enough to prolong fœtal life. The methods of inducing premature labor are now so simple, so certain, and so void of danger that they, more than at any previous time, present themselves as a sovereign resource in such cases.

And this is more especially true since Tarnier, by his glass-house with heated air, regulated so as to meet the feeble heat-making process of the premature infant, renders the perpetuation of the lives of these beings so much more certain than when they were exposed to the chilling draughts of the chamber, and perhaps were at once dipped in water and exhausted by washing and dressing.

How often has every man in this room watched

with intense interest and anxiety the following picture! A mother of several children, a beloved wife, and the centre of a large circle dependent upon her for love, for care, and for counsel, about the end of the seventh month develops the symptoms of placenta prævia, or severe puerperal nephritis. The physician cannot conceal from those who surround her the fact that the violent hemorrhage or sudden convulsive seizure may at any moment destroy life. Should one of these occurrences take place, the patient's friends know full well that it may be hours before medical aid can be obtained in their dire necesity. Day after day the painful process of watching, hoping, dosing goes on; and gradually the symptoms grow worse until the final issue comes, and great joy is felt if, the child being sacrificed, the mother survives. It is to save all this, at the expense only of exposing the child to the danger of premature birth —a child, too, whose life would be at great hazard even if the pregnancy were allowed to proceed— that premature labor offers itself as a valuable resource.

The obstetric forceps is probably the most life-saving instrument which surgery has ever invented; and from the time of the Chamberlens, about 1647, thousands in every generation have endeavored to improve it, thousands have handed down their names in connection with it by suggesting trivial modifications, and thousands have in their efforts rendered themselves butts for the laughter of their successors by reason of the vanity which guided them. Few, very few, real improvements have been made in these instruments, and these improvements have occurred at long intervals. The Chamberlens used short, straight forceps; Levret and Smellie added length, and gave a pelvic curve to these, and nearly, if not quite, doubled their value; and Tarnier, of France, has, in our day, added a pair of tractors which enable the operator to pull more accurately in coincidence with the superior strait, while the handles are still in the inferior. This is the only real improvement in these instruments since the days of Levret and Smellie, and, like theirs it marks an era in the history of the instrument, and a mile-stone in its advancing usefulness. There, are cases, many cases, in which it is not called for; there are some, and not a few, in which it gives great facility in delivery.

Of late two substitutes have been proposed for the Cæsarean section—extirpation of the gravid uterus and its annexa after delivery of the child from it, or Porro's operation; and delivery of the child above the superior strait of the pelvis by cutting through the abdominal walls and vagina, or laparo-elytrotomy.

R. P. Harris, the only great medical statistician that America has yet produced, reports in October, 1883, that the combined Porro and Porro-Muller operations saved, out of 116 cases, 48$\frac{4}{5}$ per cent. of mothers, and 90 out of 118 children. Garrigues, in an able and exhaustive essay, reports in the same year that, out of eight operations, laparo-elytrotomy saved half of the mothers and all of the children except two, who died before the operation was undertaken.

In general terms, I think that, to state the comparative success of the two operations, it must be said that the results of laparo-elytrotomy have thus far been superior to those of the Porro-Muller operation, but that for some inexplicable reason the latter has found favor with the profession, both in this country and in Europe, which the former has failed to obtain.

From my experience with laparo-elytrotomy, I feel certain that, if a fair trial is given to it, it will surely yield a success greater than either the Cæsarean section or the Porro-Muller operation. It is so easy of performance, inflicts so little injury upon important viscera and has already proved so successful, that I cannot doubt its merits.

We must not conclude that, because the general professional mind is not favorable to an operation which has been little tried, such an operation has "been weighed in the balance and found wanting."

The following examples will prove the contrary: In 1834, Gossett, of London, discovered the present operation for vesico-vaginal fistula—position, metal suture, speculum, and all—operated twice, and published his operations. Yet it was left for Marion Sims, in 1852, to re-discover the whole matter.

The greatest advance which has been made in medicine during the present century is the application of clinical thermometry, and its adoption is, as you all know, quite recent. Yet, about one hundred years ago, Currie, of England, fully developed this invaluable contribution to scientific medicine merely to see it pass out of notice and yield no results. And these are by no means the only instances of want of appreciation which can be quoted. I do not, therefore, despair of laparo-elytrotomy, but, from my personal knowledge of its advantages, am very hopeful of its future. A little over a month ago Dr. Pilcher, of Brooklyn, having under his charge a case of labor in a deformed woman, aged twenty-one years, in good health, but with a rachitic pelvis, giving in its antero-posterior diameter of the superior strait a measurement of two inches, sent for Dr. Skene, to aid him. After she had been in labor eight hours, Dr. Skene, with his well-known skill, performed laparo-elytrotomy and delivered her of a living child. To-day both mother and child are perfectly well, the after-history of the former being entirely uneventful, the wound healing by first intention, and the patient sitting up on the twenty-first day. It gives me great pleasure to avail myself of Dr. Pilcher's kind permission to report this, as yet unpublished, case to you to-day. And now, in all candor, let me ask you if a procedure which has effected such a result repeatedly, both as regards mother and child, should not be at least fairly tried before it is cast aside among the failures of obstetric surgery.

From the earliest records of medicine in Egypt,

of Greece, and of Rome, the practice of gynecology can be readily traced, and although, like all other learning, it became paralyzed by the baneful influence of the dark ages, it was upon the revival of letters at once pursued. Before the middle of the present century, however, it did not in any respect deserve the name of a science. About that time, through two influences—the speculum, which since the days of Récamier had slowly worked its way into use, and anæsthesia, which enable the surgeon to perform operations, both tedious and painful. upon the genital organs—the science of gynecology passed in great degree out of the domain of medicine, with its uncertain theories and doubtful resources, into that of surgery. And from that day a new era has existed for this department of medicine which has given it a place among other, not only of respectability, but of dignity. I know not what view others may take as to the influence which has had so great a result upon gynecology, as all have seen exerted during the past quarter of a century, but, in my judgment, it is the bringing into the service of the department the powerful aid of surgery. Let me beg you to observe that I am not urging the claims of surgery at the expense of those of constitutional treatment in gynecology. Far from doing this, I am a strong advocate for the great advantage of constitutional treatment in diseases of the pelvic viscera of the female. There is no more clashing between medicine and surgery here than there is elsewhere; they should work together for good, the one sustaining and supplementing the other. Nevertheless, I fearlessly assume the position that an enlightened, conservative surgery is the pivot around which is to revolve the gynecology of the future, and that, were surgery withdrawn from this department to-day, it would be emasculated of the greatest part of its usefulness and efficiency, and would gradually lapse into the condition which it occupied half a century ago.

Every virtue has a vice which so closely corresponds to it, and so nearly resembles it upon superficial examination, that the real and the false are often confounded. Vanity often simulates modesty; cold policy passes current for charity; even arrogant pride is not rarely mistaken for humility. In medicine, cant, for there is cant in medicine as there is in religion, in politics, and in all other spheres in which the mind of man works, is often mistaken for that most laudable and meritorious of medical qualities, conservatism.

When vaccination was introduced, a great deal of medical cant was talked; and so when the pains of labor were first assuaged by chloroform; when ovarian tumors were submitted to laparotomy, and thousands of valuable lives were yearly saved; and so, also, when the obstetric forceps was put upon its proper basis as an instrument to be resorted to in the interest of mother and child before the symptoms of powerless labor had absolutely developed themselves. When, through the instrumentality of Simpson, Sims, and Simon, surgery was introduced into gynecology, a jeremiade was inaugurated, the echoes of which are only now dying away like the grumblings of a recent storm. Those who practised gynecological surgery were accused of recklessly mutilating the most beautiful of God's creation. Their conservatism was impeached, their judgment was impugned, their honesty was attacked. And what has been the outcome of the controversy? What is the present status of the moot question? By the aid of gynecological surgery, thousands of women, who formerly filled beds of suffering throughout their menstrual lives, are now in a month or two restored to perfect health; thousands who were doomed to early death are saved; thousands who for weary years visited the offices of one, and then another, and still another physician, resisting the powers of general tonics, and nitrate of silver, and potassa fusa, and the actual cautery, are now quickly enabled to perform all the duties of life without exhausting their resources by yearly stipends to the medical man. A woman suffers from profuse leucorrhœa, and backache, and difficult locomotion. Formerly she would have gone, times without number, to her doctor's office to have caustics applied to the ulcer of the neck of the womb, until he got tired of her or she of him. Now a lacerated cervix is cured by Emmet's great operation, and limit is put to her patience and her husband's capacity to bear expense. A young woman, whose terrible sufferings at menstrual periods have half crazed her, made her nearly an opium-eater or gin-drinker, and almost transformed her into one of those social vampires who suck the sympathies and vital force of a whole family in place of blood, instead of living on, a libel upon her sex, is cured by Battey's operation and restored to her place in life. Another, who has had the accident of lacerated perineum inflicted upon her by parturition, instead of passing her life in "ringing the changes" upon all the varieties of pessaries known to art, is cured by perineorrhaphy or colporrhaphy. And still another who, perchance, for twelve years has had an issue of blood, and who has suffered many things of many physicians, and has spent all that she had and was nothing bettered, but rather grown worse, after having exhausted all the hæmostatics and oxytocics and astringents, has a loop of wire, called a curette, carried into the uterine cavity, and fifteen or twenty fungoid growths, about as large as grains of barley, removed, and straightway the fountain of her blood is dried up.

Surely the time is at hand when the gynecological surgeon may boldly say to his detractors, "enough of this, the logic of events condemns your futile efforts," and to those in his own department, "he who is not prepared to give his patients the advantages of surgery, either at his own hands or those of another, is not prepared to act honestly and fairly by those who intrust their interests to his keeping."

The pathological conditions which most frequent-

ly result in that chain of symptoms which mark the pelvic diseases of women may, I think, be fairly tabulated in the following manner:

1. Injuries received during parturition.
2. Natural or acquired imperfections of the uterus and ovaries.
3. Displacements of the uterus.
4. Benign neoplasms in the uterus, ovaries or annexa.
5. Tubal and ovarian diseases.
6. Uterine catarrh.
7. Hyperplastic development of the endometrium.
8. Neuroses, such as vaginismus.
9. Inflammatory disease of the pelvic areolar tissue and peritoneum.
10. Malignant disease of the uterus or ovaries.

It may safely be said that in almost all of these a resort to surgical interference is often an essential to cure, while in most of them it is absolutely so.

No surgical procedure has more profoundly excited the interest of gynecologists during the last decade, and I may add that none has done more good, than the operation of trachelorrhaphy. That its future sphere of usefulness is a large and brilliant one, no one who has studied its results without prejudice, at the bedside, can for a moment doubt. May its originator long live to enjoy the evidence of the good which his labors have accomplished, and will continue for all time to effect.

Extirpation of the ovaries for three purposes; 1. For effecting a premature menopause; 2. For checking the growth of large fibroids; 3 For removal of ovaries and Fallopian tubes for hydro- and pyo-salpinx, and resulting pelvic inflammation —has now become a well-recognized and accepted resource in gynecology. The originators of these operations, for they really differ from each other in many essential respects, are Battey, Hegar and Tait. So great are the benefits resulting from these procedures in the various conditions for which they are practised that nothing can now stop their advance.

Nevertheless, as I look to-day into the future of any operation for removal of the ovaries, I see it the instrument of great abuse; I see it performed in numerous cases of mental disorder aggravated by the menstrual molimen in which it will fail of result; in many of uterine disease which could without its aid have been cured by care, patience and skill; and in a great many cases in which diagnosis is obscure, and in which a resort to it is, to say the least, empirical. But I see opening before it, in the future, also a wide, very wide field of usefulness; I see cases of women, doomed not only to misery themselves, but dooming whole families to life-long discomfort and anxiety, entirely relieved by it; and I see many instances in which, without it the curses of opium-eating and dipsomania which frequently ingraft themselves upon the monthly recurring dysmenorrhœa, lifted by it from moral death to lives of happiness. Are we to reject agents capable of great good because by misdirection they are likewise capable of great evil? No; let us hail the good and apply it to man's wants, and let us strive as best we may to limit and control the evil which we cannot wholly avoid. No one can doubt that numberless evils have attended upon the discovery of gunpowder, yet no one can be blind to the fact that that discovery has done a vast deal for advancement of civilization and the best good of mankind.

Even as early as the year 1560 Andreas à Cruce is said to have removed the uterus *per vaginam* for carcinoma uteri, and it is probable that even before his time Soranus had performed this desperate operation, which taxes in our day the skill, boldness, and resources of the surgeon. During the eighteenth century the operation was several times performed, and in 1813 Langenbeck had a successful case. In 1829 Recamier made improvements in it, and in 1878 Czerney revived the operation and placed it upon a firm basis. In 1883 Langier published the following statistics of the procedure:

Vaginal extirpation of cancerous uterus,....	133
Recoveries,.....	95
Deaths,.....	38
The percentage of deaths being,.....	28

In 1884 P. F. Mundé published statistics of 256 cases, with a mortality of $24\frac{9}{19}$ per cent.

Freund, in 1878, revived the operation of the removal of the uterus by abdominal section, a procedure put in practice by Gutberlat as early as 1825. Freund's operation has now been performed 106 times, with a result of 72 deaths and 34 recoveries.

Not to detain you longer upon the present status of these two heroic procedures for desperate conditions, I would sum up the matter by the statement that Freund's operation, by reason of the great difficulties and dangers which attend its accomplishment, is now relegated to disuse; while vaginal extirpation of the uterus, although acknowledged to be a procedure of great danger, of undoubted difficulties, and of questionable results, has conquered for itself the position of a recognized, legitimate, and even valuable procedure.

An operation which ends fatally in one-quarter of all the cases submitted to it is a procedure of questionable character, of course; but let him who feels disposed to question the justice of the estimate here given remember the terrible future which inevitably attends upon the progress of uterine cancer—the physical suffering, the mental distress, the disgusting concomitant circumstances—and he must admit that any operation which has the power, even at the imminent risk of death, to lessen or remove these, should be hailed as a precious resource!

Uterine extirpation for cancer, however, is one of the most difficnlt and dangerous of the resources of surgery. As a compromise measure, removal

of the entire neck by a conical section extending even up to the fundus uteri, and subsequent closure of the cervical lips by suture, often supersedes it with great advantage.

Deformities of the uterus which alter its shape, impair its nutrition, and interfere with the perviousness of its canal, have long been recognized as grave pathological factors; and even in our day the most sanguine practitioner must admit that their treatment is difficult, uncertain, attended by the dangers of cellulitis and peritonitis, and unsatisfactory to a lamentable degree.

At the present day there are three methods by which uterine deformities—anteflexion, retroflexion, and lateroflexion—are treated: First, the misshappen organ is repeatedly forced into better form by the introduction of the uterine sound, and subsequently it is in a lame, uncertain fashion sustained by a vaginal pessary; second, the tortuous cervical canal is cut at the internal and external os, and a uterine stem is introduced and kept in place by a sustaining vaginal cup; and, third, the whole uterine canal is at one sitting distended by a powerful "divulsor," or expanding forceps, to as great an extent as the tissue of the organ will bear. The first two of these methods are well known to you; it is the last I would now bring to your notice.

The heroic nature of this operation, its apparent brutality, and the dangers which one would naturally fear as a consequence of the forcible stretching of uterine tissue, which is really equivalent to absolute tearing of it, has retarded its advance to the position of an accepted operation. Its introducers and chief endorsers have been Priestly, Borck, Ball, and Ellinger, all of whom have claimed for it not only excellent results in cases of uterine deformity, but also a very marked immunity from the accidents which one would fear from it. In this city Dr. W. Gill Wylie has reported very favorably of it and Prof. Goodell, of Philadelphia, has recently published a paper upon it which, with the strong endorsement of his name, will go far toward rendering it popular, and exciting others to a fairer trial of it than it has yet received. Personally I have no experience of it worth reporting, but I certainly feel it a duty to test the question of its use fully from the evidence which we now have before us.

In connection with my subject I would mention four drugs which have of late been introduced into practice, all of which appear to me to possess sufficient value to warrant their special mention here. These are the permanganate of potash, and the fluid extracts of the stigmata and ustilago maidis of the *Viscum album*, of the *Viburnum opulus* and *Viburnum prunifolium*.

Permanganate of potash, introduced by Sydney Ringer, of London, as an excitant of the menstrual flow, is, I think, the best emmenagogue which has yet been discovered. The stigmata and ustilago maidis, or ergot of corn, are, like the fluid extract of *Viscum album*, or mistletoe, excellent oxytocic agents, and replace the ordinary secale cornutum very well, not only during labor, but in causing uterine contraction for the relief of metrorrhagia, uterine fibroids, subinvolution, etc.

The medicinal virtues of the *Viburnum opulus* and *Viburnum prunifolium* appear to consist in an influence of sedative character upon the utero-ovarian nerves. These drugs have been greatly lauded as preventives of threatened abortion, and remedies for the pains which attend disordered menstruation. Although in my experience they have fallen far short of the excellence which has been claimed for them, I feel sure that they possess a considerable degree of virtue.

Although the prolific theme which you have allotted to me, Fellows of the Association, would readily afford me material for a much longer address, the fear of taxing your patience admonishes me of the propriety of bringing my remarks to a close. In doing so, let me beg of you to accept my thanks for the kind attention which you have accorded me—an attention which has given zest to my efforts and rendered my task a pleasure instead of a labor.

DYSPEPTIC NEURASTHENIA.

The following is the substance of the remarks made on the above subject by Dr. Ewald at the third Medical Congress (at Berlin), and reported in the *Berliner Klin Wochenschrift*.

Our intention should not be confirmed to the stomach, but should be directed with at least equal interest to the intestinal tract. In none of the patients suffering from the complex of symptoms embraced by the terms "dyspeptic neurasthenia" (or neurasthenic dyspepsia), were intestinal troubles absent. These latter are not always severe, and there may be merely constipation or diarrhea, or insufficient absorption. But they may become very prominent, so as almost to constitute a seperate class, as Cherchevsky has lately shown (*Revue de Médecin*, 1884, No. 3). There is severe abdominal pain, and the abdomen is not retracted, but distended by gases (flatulent dyspepsia). The general nervous symptoms are usually more severe than in the purely gastric form. Thus in this dyspepsia both stomach and intestinal tract are together affected, but usually not in an equal degree.

The term "asthenia," introduced by Brown and adopted by Brussais, indicates a condition of weakness of an organ, which is shown at first by morbid irritability, and afterwards by lowering of its functions. Thus the term "dyspeptic neurasthenia" is better than "nervous dyspepsia," because the dyspepsia is then made a part of the general affection of the nervous system; but the latter expression is more popular.

The symptoms, of which none is special to the disease, but each of which may also occur when organic alterations are present, are mainly the

following: a coated tongue, bad taste, dryness of mouth or else increase of saliva, foul breath, eructations, pyrosis, want of appetite, repugnance to food, ready satisfaction after ravenous hunger, inflation of the stomach by gases, restlessness (Kussmaul), meteorismus, etc.

Burkart has drawn attention to the fact that strong pressure in these cases in the situation of the great abdominal plexuses causes sharp pain; and he considers such spots analogous to the "tender spots" of hysteria, inasmuch as these particular pains are only evoked by pressure, and are not to be confounded with subjective gastralgic pains. The author confirms this to some extent, but the symptom may be absent. Rosenthal mentions painful spots also along the spinal column, but these are still less constant.

Great weight has been laid on the general nervous symptoms, which may be hereditary or not, and are often very prominent. The intestinal neurosis is nearly always preceded by general (nervous) prodromata, which may also accompany it. Such are headache, toothache, weariness, a disposition to look on the dark aspect of things, an unnecessary gloominess, a saddened character of voice, etc. Weakness of memory, and inability to think collectively may go on to vertigo at times. The pulse is small and frequent, the hands and feet cold, and palpitation and dyspnœa accompany exertion. These latter symptoms may give rise to the greatest agony, as if death were impending, till eructations alter the scene.

All these symptoms are here purely nervous, and do not rest on palpably central nervous lesions, like the gastric crises of tabes dorsalis, or the gastric symptoms of diffused and localized cerebral lesions, or those occurring in chlorosis, menstrual derangements, uterine or ovarian troubles, severe psychic excitation, as "nervous diarhœa" or constipation. All these differ from mild gastric neurasthenia in their severity and sudden development. Richter and Leyden have enlarged on such cases.

Prof. Leube is inclined to regard so-called "nervous dyspepsia" as a local disease of the stomach, but none of the chief recent writers on the subject think so. The dyspepsia is a symptom, and not a disease; no pathological changes in the stomach have occured, in the ordinary sense of the term. Goltz has shown how slight irritation, normally without any effect, may cause severegastric symptoms, in spinal and cerebral lesions.

The diagnosis is not always apparent. The long course of the disease, its original manifestations, the failure of local treatment, and the recognition of other neurasthenic symptoms, are its chief elements. The pains are less localized in character and less connected with food, than in organic disease. Vomiting seldom occurs. The stools vary in character, and the author has not remarked the ribbon-like character of the fœces so much dwelt upon by Cherchevsky.

Leube gives the "digestive experiment" as an aid in the differential diagnosis. This simply means that the stomach is empty seven hours after a meal, in health or in gastric neurasthenia, as tested by washing out. This is correct in the main but too absolute.

Leube further states that 50 cubic centimetres of a 3 per cent. solution of caustic soda, injected into an empty stomach, are completely neutralized in twelve minutes, in health. This quantity contains then 3 grammes of soda (46.3 grains), and would require about 15.4 grains of hydrochloric acid. Assuming gastric juice to contain 2 parts of acid per 1,000, we should have to suppose that 250 cubic centimetres (more than 8 ozs.) of gastric juice were secreted in twelve minutes to neutralize only the half of this. Such a quantity is out of the question, and we can only suppose (if the fluids of the stomach be found nentral after the time given) that much of the alkali has been absorbed or has passed into the intestine. This, of course, destroys the value of the experiment. The stomach pump should not be used when there is any suspicion of gastric ulcer. Violent peristaltic movements might cause perforation, apart from mechanical injury. Long observation is sometimes necessary to establish the diagnosis.

The prognosis and treatment follow of themselves. The former is uncertain, as in all neurasthenic affections. The milder cases are often the most obstinate, and *vice versa*, but in the mildest cases the affection lasts for months at the very least. The treatment must be general, all local medication is idle to the purpose. The nervous system must be strengthened and calmed. The mind and body must be occupied, and both must be fed. Gymnastic movements or abundant exercise, and hydro-therapeutic measures, are valuable. The diet should be simple and sufficient. Trousseau said that the best *régime*, and the only one suitable, was that which the patient from his own experience could support best. It should, however, be unirritating. Sedatives are useful, especially potassium bromide in large doses and, as tonics, quinine and arsenic, especially the latter. The English give belladonna in large doses 0·05 to 0.1 gramme (¾ grain to 1½ grains), even up to 7.7 grains in a day, to overcome obstinate constipation depending on spasmodic contraction of the intestinal muscular fibres. Small doses should always be given first, to ascertain how the patient bears the drug. There are two drugs of especial efficacy, chloral in gastric hyperæsthesia, and opium when the irritation is chiefly intestinal. The former has a slightly antifermentative action, besides its sedative influence and opium act not only on the distension and flatulence, but often in an aperient manner also. "Wind" is a potent cause of distress, and the constipation is often due to an obstinate contraction of the intestinal muscles. This latter is often easily overcome by opium, together with some mild vegetable aperient, such as rhubarb, castor oil, or tamarinds. Salines are to be altogether

deprecated. They only irritate the intestine and increase the discomfort, and thus a vicious circle is set up.

HEADACHES.

Dr. J. W. Given, of Salem, Oregon, in the neatly-issued Proceedings of the Eleventh Annual Meeting of the Oregon State Medical Society, 1884, gives a resumé of what is known concerning some forms of headache that are well worth repetition.

He first speaks of *hyperæmic headache*. Adopting the view that the quantity of blood in the brain varies, he asserts that the increase or decrease in the quantity of cerebral blood may extend beyond physiological limits, and result in headache. He assumes the debatable position that the activity of an organ increases with its blood supply. Hence "the obvious indication is to lessen the amount of brain-work." "Excessive worry" will generally be found to constitute a more important causative element of hyperæmic headache than "excessive over-work." He thinks such "worries" and their occasions should be honestly stated, the trouble thus removed, quiet of mind restored, and thus relieve over-tension of the cerebral blood vessels and thus quiet also the "brain cells," which have been over-excited and too long overstrained. "If the cause of worry is one that will grow less with time, the headache may be relieved for the time being by bromide of potassium." Compressing the carotids will also diminish the amount of blood in the head. Plenty of sleep must be secured. Hot foot baths should be used to divert the blood from the brain. Brisk cathartics often have good effect. Blisters to the back of the neck are sometimes helpful. If the headache is due to systemic plethora, the lancet should be resorted to. General exercise is good. If hypertrophy of the heart is the cause, tincture of aconite and of veratrum to lessen the heart's action and arterial tension should be prescribed. Belladonna plasters over the heart sometimes quiet its turbulent action. In cases of cerebral hyperæmia, due to worry and over-work of the brain, systemic anæmia often exists. Then chalybeate tonics are especially called for; but as a rule they should not be administered alone. Hyperæsthesia of the brain cells is probably best relieved by potassium bromide. But this agent "usually impairs digestion, and, if continued in large doses, will lessen the normal activity of the brain." Dispense with it, therefore, as soon as possible. When the blood-vessels have been so overtaxed as to greatly impair their elasticity, and hence are passively filled with blood, the patient will experience headache by over-turgescence when he lies down—by the law of gravitation, in short. When such a condition occurs, elevate the head by pillows, lie with the arms extended above the head, compress the carotids, and, in some cases, arrange for the party to sleep in a sitting posture. Brain work must be reduced to the minimum. Fluid extract of ergot, in commanding doses ought to be given, with a view of keeping the blood-vessels contracted. The "common cold headache," "probably due to hyperæmia of the brain and a general toxæmia of waste products remaining in the blood, will usually be relieved by hot-air baths, with very small doses of tartar emetic" with stimulants, as ammonia, quinia in large doses and alcoholic drinks, accompanied by mild laxatives. [it is not thought in this community, that "quinia in *large* doses," is a stimulant.]

In anæmic headache, improve and increase the amount of blood in the head. Give good food and drink, plenty of exercise, and rest and sleep must be insisted on. No medicine can properly take the place of these means. Such patients flourish upon the same principles which a thrifty man applies to his horse. As medicines, iron and quinia, are the "stand-bys." Iron preparations least trouble the stomach when given two or three hours after meals. Fowler's solution of arsenious acid and cod-liver oil are useful—the latter especially in the anæmic headaches of children. If a weak heart exists, the recumbent position will [sometimes] do the double work of supplying the brain with blood and diminishing the heart's action. Digitalis also tends to make a weak heart strong by slowing its beats, thus affording it more time to take in blood. The anæmic headache which follows great loss of blood is often temporarily relieved by wrapping very hot cloths around the head. Alcoholic stimulants will also often afford temporary relief. Of course all abnormal drains should be corrected. In short, each pathological lesion causing anæmia should receive special attention.

Toxæmic headache. Dr. Give sums up as among the causes, such constitutional troubles as "syphilis, specific fevers, retained biliary secretions and excretions, kidney and skin excretions, rheumatism, lithiasis, and possibly that mysterious something called malaria." When these are the causes of pain, protect the nerves against irritants by opiates which also relieve pain. To avoid their constipating effects, combine it with belladonna or atropia, as best suits the case. Of course use mercury and iodides to cure syphilis. In cases of specific fevers, protect the nervous system against the poison [If a specific or other remedy is known that will do so], and also against excessive temperature. Cold sponging will relieve the temperature. "Time alone will exhaust the poisons," Bilious headaches are relieved by calomel and jalap. Chlorids of ammonium is also useful. Nux vomica and strychnia salts, according to the manner proposed for administration, protects the nervous system, in general, against the depressing effects of retained biliary secretions. [whatever authors, of an "experimental" turn of mind may say to the contrary, mercury *does* relieve, if any medicine does do so, biliary congestions, "engorgements" or whatever is the condition that practitioners of medicine recognize and call by the common name

of "biliousness."] Change the food and habits so as to bring the patient back to health. If excessive nitrogenous food is used change the diet. Cathartics may give temporary relief but they do not change the habit. Constipation of the bowels is a common cause. If he will not adapt his diet to his condition, he must have occasional purgatives. [Fluid extract of cascara sagrada is a remedy worth trying in ordinary cases of constipation that causes headache. We know of many that get on well under its empirical use.] In headaches due to renal secretions, opium renders the system partially tolerant of the presence of poisons. Eliminatives, such as diuretics, cathartics, etc., should be used. The salts of lithium are also serviceable. Hot baths should be used, a free action of the skin ought also to be promoted by clothing, etc. For the rheumatic headache, he advises the free use of alkalies and salicylate of sodium, with opium for the immediate relief of pain. Colchicum is demanded in cases of "gouty headache." Malarial headache is relieved by quinia, Fowler's solution and tonics. All depressing influences must be avoided. The headache of lithiasis is generally relieved by the use of alkalies and laxatives, with a diet chiefly of vegetables and fruit. Sick headache is probably due to an accumulation of waste products in the blood. In such cases, a thorough emetic will not do harm, and, in many cases, will afford relief. A good cleaning out with improved compound cathartic pills or another good cathartic, will usually shorten the attack. Let the patient abstain from all active exercise. Among the prophylactic agents used for sick headache are oxide of zinc, arsenic, iodide of potassium, etc. Let experience teach the patient as to the articles of diet and drink to be used, and as to the suitable forms and times of exercise.

Structural Headaches.—Inflammations, neuralgia, tumors, tubercles, gummata, etc., are among the lesions that cause this form of headache. *Inflammations* of the membranes require active cathartics, and also such remedies as potassium bromide, chloral-hydrate, large doses of fluid extract of ergot and cold to the head with the ice-cap. Absolute rest, with the exclusion of all irritants of the sensorium, must be obtained. *Neuralgia* requires quinine, iron, Fowler's solution, morphia, and atropia for speedy relief. Of course, these empirical directions are to be used only after excluding local lesions. *Tumors* may be suspected if there be persistent headache, accompanied by a "choked disk" and vomiting. The resultant headache may sometimes yield to large doses of potassium iodide. Opium relieves the pain. Syphilitic gummata are generally removed by overwhelming doses of potassium iodide—200 or 300 grains daily. Nothing is curative in *tubercular headache.* Opium affords temporary ease.

Dynamical Headache.—Let the patient learn to practice hygiene, and live according to his strength. Let him sleep as much as possible, never engage in anything that will greatly tax his vital powers, and lead a quiet easy life. The best medicines are hyoscyamus with camphor, valerianate of ammonia—using opiates if necessary. Weak galvanic currents passed through the head will sometimes improve the nutrition of the nerves.

Reflex Headaches.—Potassium bromide is the best agent to relieve the pain of a reflex irritation. Among the frequent causes of reflex headache which must be inquired into and treated, are defective teeth, eye troubles, nasal catharrh, ear diseases, dyspepsia, ovarian and uterine diseases, urethral and vesical irritation, etc. The headache of teething children is best relieved by potassium bromide, and the several other conditions named should be appropriately treated.

THE TREATMENT OF BRIGHT'S DISEASE.

Dr. James Tyson is one of our highest authorities on all diseases of the urinary organs, hence it is important that we should be acquainted with his treatment of Bright's disease. In the course of a lecture published in the *Boston M. and S. Jour.*, August 28, 1884, he thus gives it to us:

"Next, as to *treatment.* Many cases of acute Bright's disease, if recognized early, require no treatment but rest in bed and an easily assimilable diet, of which the best form is milk. Although this is true, it does not do to leave these patients unwatched, for the course of the disease is uncertain; and, as a rule, you will not rest satisfied with this treament, although what more is done will depend to a great degree upon the urgency of the symptoms. We wish to keep the kidneys acting in order to prevent the retension of urea in the blood and the consequent danger to life which arises from this accumulation. After instituting the general treatment which I have suggested, I see that the bowels are opened, for neither digitalis nor any other diuretic will act as long as the bowels are constipated. If there is costiveness, some saline laxative, as magnesia or the citrate of magnesia, or some of the natural aperient waters, should be given. After the bowels have been opened, digitalis may be given either in the form of the tincture or infusion, giving fifteen drops of the former or a dessertspoonful of the latter, every three or four hours. If this does not produce the desired effect, I should not increase the dose of digitalis, for it is liable to derange the stomach, but I should associate with it one of the vegetable alkalies, as the acetate or the citrate of potassium.

"When admitted, this man was given one-tenth of a grain of elaterium to act upon the bowels, and afterwards received fifteen grains of acetate of potassium, a teaspoonful of the infusion of digitalis every three hours, making four or five doses in the course of the day. Under this treatment he did very well, and the œdema rapidly disappeared.

"If the treatment which I have suggested does

not produce satisfactory results, and the symptoms grow worse, I sometimes use cups over the loins, relieving the renal arteries through the lumbar arteries, by the anastomosis which exists between them. After the cupping, I usually apply a corn meal or flax-seed-meal poultice, the surface of which has been sprinkled with mustard. This keeps up a permanent counter-irritation, and it often starts the secretion of urine.

"If these measures fail, free action by the skin should be promoted. This is best accomplished by jaborandi, and in this case it became necessary to administer this remedy. As I have said, the patient at first did well on the use of digitalis and the acetate of potassium, but day before yesterday the resident physician found him delirious and acting in a very singular manner. On investigation it was found that although the urine was not actually suppressed he was passing a very small amount. We at once concluded that his symptoms were uræmic, and due to the retention of urea and its allies. The complication is frequently met with: a patient will be doing well, when suddenly there will appear coma, convulsions, or delirium, as we had in this patient. In addition to delirium, the man had slight convulsive seizures. We at once proceded to treat him as we usually treat such cases in the hospital. An infusion of two drachms of jaborandi leaves in four ounces of water was made, and the whole quantity given by enema. We often make the infusion with only one drachm of jaborandi, but as the symptoms were urgent, a double quantity was used. This did not produce perspiration, and in an hour the injection was repeated. In a short time he sweat profusely. He was also given one drop of croton oil, which acted promptly. The next morning all the symptoms had disappeared and the man was entirely rational. We are not always so successful in removing the uræmic symptoms, but frequently the result is all that could be desired. In this case the dropsy was also greatly relieved by the sweating.

"The above well illustrates the usual course which is to be pursued in cases of acute Bright's disease. If the disease is promptly recognized and properly treated from the beginning, the patient generally gets well; but if overlooked, as it often is, the opportune moment may be lost, never to be regained. Perhaps no disease demands for its prompt recognition and treatment a broader and more thorough medical education.

"There are modifications of the treatment I have described which are demanded by circumstances. In private practice, instead of giving jaborandi I should use the alkaloid, pilocarpin, giving the nitrate or muriate subcutaneously. The dose is from one-fourth to one-half a grain, as the urgency of the symptoms may demand. My usual custom is to give one-fourth or one-third of a grain, and if sweating does not come on within half an hour, I repeat the dose. Jaborandi not only produces sweating, but it also increases the secretion of saliva, and may induce purging. It is also a diuretic. We have in this remedy a most valuable addition to the therapeutics of Bright's disease. In order to keep up the diaphoretic action, pilocarpin may be continued in doses of one tenth of a grain. This is readily done by the use of gelatin-coated pills. One pill may be given in the evening, or one may be given night and morning. The system rapidly becomes habituated to the use of jaborandi, and the dose has to be increased. Another good way of administering this drug is to use the inspissated juice by suppository. The fluid extract may of course be used by the mouth, but it is a less agreeable remedy.

"If jaborandi cannot be procured, there are other ways of inducing sweating which we have now almost entirely given up, although they are very efficient. Hot-air or steam-baths may be used for this purpose. In employing the hot-air bath the patient is covered with a rubber blanket, and a tube with an expanded extremity which is held over a spirit lamp is passed beneath the covering. In the steam-bath, the steam from an ordinary tea-kettle may be conducted through a piece of rubber tubing under the bed-clothing. These methods are not as promptly effectual as the administration of jaborandi, but at the same time there are circumstances when they may be required.

"There is another method of treating urgent uræmic symptoms which should be mentioned that is, bleeding. I should not hesitate to bleed a patient suffering with uræmia if he is not relieved by the measures described. As you are aware, the uræmic symptoms are dependent upon the retention of urea and allied substances in the blood, which, when they have accumulated to a sufficient quantity, act upon the nervous system, producing delirium and convulsion, or coma. The condition is, in fact, an intoxication. If under such circumstances the patient is bled and a pint or a quart of this blood removed, some of the poisonous material is taken away and the patient is relieved. In puerperal cases I believe that bleeding relieves not only by diminishing the vascular and nervous tension, but by removing the accumulated uræmic poison which has produced the symptoms.

"Another valuable remedy for the control of uræmic convulsions, which should not be forgotten, is chloral. So far as the relief of the convulsions goes, jaborandi is a slowly-acting remedy, because it operates by removing the poison from the blood. Something is needed to act upon the nerve-centres and obtund them, and make them less susceptible to the poisonous substance. Chloral often admirably answers this purpose. It may be given by the mouth or rectum. By enema the dose is one drachm. I have seen the convulsions stop almost instantly after such an injection.

"There is still another remedy which has been strongly urged by some, which should be used

with caution, and that is morphia. It is some years now since Dr. Loomis, of New York city, advocated the hypodermic administration of one-half a grain of morphia for the relief of the convulsions in acute Bright's disease. There is no doubt that in certain chronic forms of the disease, more particularly in the contracted kidney, the effect of opium is to increase the danger of uræmia; and Dr. Loomis states explicitly that this treatment is only applicable to the acute disease. I confess to being less particular in the use of opium in chronic Bright's disease than I used to be, always excepting contracted kidney; and where other remedies fail I would use a hypodermic injection of morphia in the uræmic convulsions of Bright's disease, but I should arrange the order of remedies rather as follows: jaborandi, chloral, bleeding, morphia.

"With such measures, these cases can often be brought to a satisfactory termination; and although the appearance of uræmia is a serious sign, yet it does not necessarily follow that the patient will die, and recovery therefrom in acute cases is not uncommon. Uræmic convulsions in chronic Bright's disease is a far more serious condition."

CAMPHOR INHALATIONS IN CORYZA.

Dr. G. E. Dobson writes in the *Lancet*:

This very troublesome complaint has scarcely received the attention it deserves, if we take into consideration the great number of sufferers and the serious laryngeal and pulmonary diseases to which it is too often a prelude. Amongst the host of remedies proposed for its abortive treatment, most of which are of doubtful value, or difficult to procure or apply, or even dangerous to use, not one can be named of which it may be said that it is at every one's command, easy of application, unattended with danger and really effective. No excuse is therefore needed for introducing to the notice of the profession the following simple yet thoroughly effective mode of treatment, which in my hands has never disappointed expectations.

About a drachm of camphor, coarsely powdered or shredded with a knife is placed in an ordinary shaving jug, which is then half filled with boiling water. The patient having made a paper cone) out of a sheet of brown paper or an old newspaper) large enough to surround his face with the wide extremity, and the mouth of the jug with the other end, proceeds to respire freely, at each inhalation drawing the steam into his nostrils, and at each exhalation forcing it up against the outer surface of his nose and the adjoining parts of his face. A twofold action is produced, the camphorated steam acts internally in a specific manner upon the whole extent of the mucous surfaces, and externally produces perfect diaphoresis of the skin covering the nose and sides of the face, there acting as a derivative from the inflamed Schneiderian membrane,

The jug should be surrounded by a woollen cloth in order to prevent the water cooling, or, better, if a tin can be used, a small spirit lamp or heated iron may be placed beneath it, so as to maintain the heat of the water and the vaporization of the camphor.

The patient should continue his respirations (keeping the margins of the paper funnel closely applied round his face) from ten to twenty minutes, and this should be repeated three or four times in as many hours, till entire freedom from pain is experienced. Great relief is always felt, even after a first application, and three or four usually effect a cure. Camphor, or some of its preparations, have, as is well known, long been in use in the treatment of colds, but the above described method of employing it in conjunction with the vapor of water, both as an internal and external application at the same time, has not, so far as I know, been previously brought to the notice of the profession, or if brought, has not been recognized in any general or specia medical work. The mode of application, however is all important, but as this is neither troublesom nor otherwise unpleasant to the patient, nor are the materials difficult to procure, camphor being everywhere a household drug, I believe that those who may give this treatment a trial will find it not only a simple but most effective remedy against coryza. —*The Practitioner.*

SCARLET FEVER: HOW TO LIMIT ITS CONTAGION.

W. A. Jamieson, M.D., (*Edinburgh Med. Jour., March.*) The author states that the disease is scarcely if at all infectious in its earliest period, when most easily recognized, but it becomes day by day for a considerable time increasingly communicable. The susceptibility to the disease diminishes with advancing age. The contagium of the disease exists in the desquamated skin, and in the exhalations of the lungs. We have no available means of disinfecting the atmosphere of a room while the patient is in the apartment. The first essential is to isolate the patient and his attendants. The second is to use proper disinfectants about the throat, and over the skin of the patient during desquamation. We too often disinfect the patient's clothing and bedding, but forget to disinfect the patient himself. Warm baths should be used daily from the outset at a temperature of 95½ to 98½ F. After drying the skin the whole body should be anointed with the following:

℞ Acid. Carbol., ʒ ss.
Thymol, gr. x.
Vaseline, ʒ i.
Ungt. Simp. q. s. ad., ℥ i.

M. Ft. ungt.

The thymol must be dissolved by a little heat or its crystals will irritate the skin.

This should be used in the morning as well as

after the nightly bath. When the patient is well enough a thorough scrubbing of the whole body, the head included, with carbolic acid soap is useful to remove any lurking traces of infection. For the throat the best disinfectant is a saturated solution of Barff's boroglyceride in glycerine. The throat, tonsils and nose, if affected, should be brushed with this three or four times a day. It is painless and the taste not disagreeable. All linen used about the patient should be immediately put in a carbolized solution. The author thinks that if the plan above indicated has been carried out, it is unnecessary to isolate the patient for the whole period of desquamation. This is variable in different cases. The physician's injunctions are usually disregarded. The state of the patient's health and the stage of his convalescence are better guides to the time when he should be allowed to mingle with others.

The room should be thoroughly scrubbed and fumigated with sulphur. What protection is afforded by the above measure in cases in which isolation is impossible is illustrated by the following examples. A family in which there were five children occupied two rooms. None had had scarlatina. The oldest contracted from exposure, the parents refused to allow her to be sent to a hospital. The directions were carried out faithfully, and none of the others took the disease. In another family, also accupying two rooms, there were four boys and the parents. The youngest, aged 13, had a severe attack of scarlatina anginosa. He was delirious for days. All in the family assisted in the care of the patient and none took the disease. In no instance—and there were many—in which this treatment had been followed

PEPTONIZING OF MILK.

The pancreatic secretion digests milk that is rendered alkaline at 100° to 150° F. Milk thus treated becomes in 20 to 60 minutes thinner, resembling human milk in appearance, and if the peptonizing be continued beyond a certain point and is more complete, its taste is decidedly bitter. The process should be watched and the peptonizing suspended as soon as the bitterness becomes appreciable, for although more advanced peptonizing so changes the milk that it is more easily digested by the infant than when the peptonising is partial, yet the bitterness which is imparted to it renders it very disagreeable as a dietetic preparation. Milk thus prepared closely resembles human milk in appearance, and its casein is so digested that it is either not precipitated by acids or is precipitated like that of human milk in flakes. By this process a digested or an easily digested casein is produced instead of the casein of ordinary cow's milk, which produces large and firm masses in the stomach, masses which the digestive ferments penetrate with such difficulty that they cause indigestion and appear in the stools as coagula of greater or less size. Pfeiffer pointed out that when peptonized milk is employed "the fæces showed absolutely no trace of the white cheesiness." Milk thus prepared quickly spoils, and it is necessary to peptonize it in small quantities and often during the twenty-four hours.

In New York during the last year, peptonized milk has been employed largely as recommended by Pfeffer, and with such results as to encourage its further use. It is now used in the N. Y. Foundling and Infant Asylums. Extractum pancreatis gr V, and sod. bicarb., gr. X are added to one gill of warm water. This is mixed with Oj of warm milk and placed in a convenient vessel in water kept at 100° F. for one hour or less if it begins to be bitter, when it is placed upon ice to prevent further digestion. With some specimens of milk, especially at a temperature of 115° to 120° F., a half hour or even less is sufficient. This artificial digestion is arrested either by boiling the peptonized milk, which destroys ferment, or by reducing its temperature to near the freezing point, which renders it latent and inactive, but does not destroy it. In the present state of our knowledge of infant feeding we can recommend no better substitute for human milk than peptonized cow's milk, which promises to be instrumental in saving the lives of many infants who by the old method of feeding would inevitably perish.—*Dr. F. Lewis Smith in Archives of Pediatrics*, July.

ANTISEPTIC UTERINE INJECTIONS IN PUERPERAL SEPTICÆMIA.

In the *Journal American Medical Association* of August 2nd, 1884, Dr. Madison Reece writes of the value of antiseptic uterine injections in puerperal septicæmia, and cites several interesting cases of women snatched from the very jaws of death by their persistent use. He uses a solution of permanganate of potash, two drams to the half gallon of warm water and strongly carbolized water. An injection is continued until the water comes away both odorless and colorless, and it is repeated according to the requirements of the case. A marked fall of temperature always follows their use. Dr. R. believes that puerperal septicæmia is often caused by infectious material from the finger-nails of the obstetrician, and says he will hail with delight the day when all puerperal women shall be treated by women obstetricians who attend exclusively to that branch of medicine. He uses in all cases twenty-four hours after confinement a vaginal injection of carbolized water, as affording relief to the patient, besides thoroughly cleansing the parts. Should the temperature rise the injection is made intra-uterine. For vaginal injections a pipe is recommended with the hole at the end closed, as uterine colic is sometimes caused by the water being inadvertently thrown through the patulous os into the cavity of the uterus.—*Md. Med. Journal.*

NEEDLESS AND USELESS COUGHING.

An exchange quotes the following from the *British Medical Journal:* There is in the world a great deal of what I am accustomed to call "needless, useless coughing." Where secretion takes place in the bronchial tubes it must sooner or later be brought up; and for this purpose some "necessary" coughing must take palace, or the patient will choke. But, both in organic diseases and in slight inflammatory or irritative affections of the air passages, there is often an immense amount of useless coughing,—useless, that is, as regards bringing up any laryngeal or bronchial secretion, and, far worse than useless, because it wears out the patient, prevents sleep, and moreover, increases the condition which gives rise to it, inasmuch as it lets the affected parts have no rest or peace. Now, the effects of opium are both local and general; and if in mucilage of acacia, or tragacanth, or in glycerine, or with a thickening solution of confection of dog-rose or honey, you give frequently from the one fortieth to the one-twentieth of a grain of morphia, you not only give a marvelous amouut of peace and comfort to your patient, but, where it is remediable, you tend also to cure the disease. A favorite formula of mine, varied according to circumstances, is:

℞ Acetate of morphine,	-	1½ grs.
Nitric Acid, dilute,	-	1½ drs.
Oxymel of squill, -	-	6 "
Mucilage of acacia,	-	2½ oz.
Glycerine, - -	-	2 drs.
Syrup of red poppy,	-	2 oz.

Cinnamon or rose water suffcient to make the whole equal six ounces.

M. To take one or two teaspoonfuls five, six or seven times in the twenty-four hours.

The coughing in pertussis may be similarly relieved.

BOILS.

Dr. John Aulde, following the suggestions of Dr. Sidney Ringer, has met with most satisfactory results by adopting the following plan. The diet is to be regulated, and if constipation exists, a teaspoonful of magnesia sulph. in a glass of cold water should be taken every morning before breakfast.

℞ Calcii sulphidi,	grs. iij.
Sacch. lactis,	grs. xxx.

Misce bene et div. in chart., No. xxx.

Sig.—Five powders daily at intervals, between meals.

By this method, beginning boils will be aborted, and those far enough advanced to threaten a siege of several weeks and successive crops, will soften and heal in such short time that the patient will be surprised at the result. When they can be obtained, granules containing one-tenth grain are to be preferred to the powders. The urine should be examined for sugar, as boils and diabetes often go together.—*Medical Summary.*

EFFICACY OF BICHLORIDE OF MERCURY IN RINGWORM

Dr. R. W. Taylor recommends a solution of corrosive sublimate in tinct. of myrrh, four grains to the ounce, in the treatment of various forms of ringworm.

Eczema marginatum and ringworm in general were readily cured by thoroughly painting, twice a day, the affected part, with the parasiticide solution.

He believes that the tincture of gum-resins make excellent vehicles for various agents of skin disaeses.

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VICTORIA MEDICAL SCHOOL.

If the Montreal daily papers are correct, it is the intention of the Montreal School of Medicine and Surgery to throw off their affiliation with Victoria College, Cobourg, and apply to the approaching session of the Quebec Legislature, for power to confer degrees in medicine and surgery. We confess that the information surprises us. In the great struggle for its existence which Victoria Medical School made during the past five or six years it had our full sympathy, and we have not hesitated to express our admiration for the courage and cohesiveness displayed during that time by its Faculty. But in the new departure which this School is said to be about to inaugurate, it cannot, in our opinion, expect to receive the support of the Medical Profession of this Province or the sympathy of the Profession in the Dominion. The reason for this is obvious, for, so far as our information enables us to judge, we are not aware of British Legislation ever having conferred upon an incorporated school the power to confer University Degrees. We believe it would be a fatal mistake for any Legislature to make

legal such an anomaly. We can well understand the very peculiar condition in which this School now finds itself, as a Faculty of a distinctly Protestant University. Most unfortunately, and we believe most unnecessarily, our French Canadian friends, have been forced to mix up religion with the study of medicine. Edicts have been issued ordering Roman Catholics only to attend Medical schools of their own denomination. The result has been that the Victoria Faculty of Medicine in Montreal has advertised itself as a Catholic School of Medicine, although what such an institution is we confess we are quite unable to understand. We know of only one point in the entire study of Medicine where the religious aspect of the subject becomes of importance; we allude to the obstetrical problem which somtimes arises as to the necessity of destroying the life of a child *in utero*. All medical men well know that the Roman Catholic religion looks upon this subject in a way different from those of the Protestant faith. But every Protestant medical man respects and acts, when occasion requires, in accordance with the teachings of the Roman Catholic Church on this point. We believe we also state but the truth when we say that all obstetrical teachers in what are wrongly styled Protestant Medical Schools by our Roman Catholic friends, fully teach the desire of the Roman Catholic Church on this subject. With this single exception, medicine is a universal science, alike to Catholic or Protestant, Jew or Heathen, and any attempt to mix religion up with medicine is calculated to make a breach which should not exist in such a profession as ours. But having advertised themselves as a Catholic school of Medicine, Victoria must feel its position as exceedingly peculiar—for how can a Faculty of a Methodist University declare itself a Catholic Faculty. If it meant simply to announce that its individual members were Catholics it would not matter, for a man's religion has nothing to do with him as a teacher of medicne and should not debar him from being a member of any Medical Faculty. But it meant more—it was intended to convey the idea that the School would be directly under the control of the Roman Catholic Church. So long as the Montreal School of Medicine has been affiliated with Victoria we hazard the opinion that her denominational principles have never once been thrust upon it. That School, known to be entirely comprised of Roman Catholic gentlemen, was permitted to conduct its own affairs—even to opening its session by a solemn Mass; but when it advertises itself as essentially a Catholic School it strikes us the Senate of Victoria College, Coburg, may have intimated it were better the relation which has so long existed between them should come to an end. If not, then perhaps the School of Medicine has recognized the unfitness of things as now existing and by this intended movement are trying to arrange matters so as to sever affiliation and yet have University powers. While we recognize that the loss of powers which affiliation gives must, of necessity be deplored by the Faculty of the School, we cannot but very strongly condemn the granting to them of powers which, at all events under British Legislation, are confined to Universities. The unfortunate position the School would occupy if severance of affiliation occurs and the powers asked for are not granted, is not an argument which can brought into a consideration of the case. The trouble has been of their own or their friends making, and should prove to them the folly of forcing the religious element, where it certainly is not wanted.

MONTREAL SANITATION.

The fair city of Montreal has a Board of Health, or rather a Health Committee of Aldermen. The gentlemen of the Council apparently do not consider this Committee of much importance unless as a sort of training school, as they shelve their new members thereon until such have gained sufficient experience in ways peculiar, fitting them for higher spheres.

The result is, that men are called to discuss sanitary matters and to adopt measures relating to public health who have never given any previous consideration to the serious problems before them. It cannot therefore be surprising to find these efforts at sanitary legislation somewhat rudimentary, and for the most part experimental. With a couple of exceptions, such are our sanitary directors—the members excepted have the technical knowledge necessary to aid the Board in its deliberations, but, judging from some of the past meetings of this Board, their suggestions appear to have little weight. Indeed, bickering personalities and squabbling seem the rule, and those most ignorant believe themselves to be the only true fountains of sanitary knowledge. What may be styled a burning question has occupied the attention of this junior committee for some time past. This originated from the necessity of finding a

means of disposal of night soil, as their contractor had been fined for depositing, or rather *spreading*, the material on a field in an adjoining municipality and also adjacent to the city water supply. The object of the contractor in doing this was to obtain, by natural evaporation, a fertilizing material out of which a profit could be made. Very properly, this procedure has been legally condemned, and the question of how to dispose of the contents of cesspools came up.

The opinion of an eminent scientist was obtained, but we must be pardoned if we fail to acknowledge that the system of dry earth closets which he advocates can meet the desired end. There can be no doubt of the value of earth closets if properly worked and used by persons of intelligence. In Montreal the majority of such people reside in houses containing water-closets, and who require no such system. It would be perfectly useless to recommend to the great mass amongst whom cesspools abound a plan the intention of which they cannot appreciate,—a class belonging chiefly to the lower and more ignorant grades of society, who are in the main regardless of any sanitary precaution the utility for which they cannot be taught to understand. It is a strange fact, although true, that civilization destroys those instincts which induces the savage to adopt sanitary measures necessary for his well-being; and leaves the lower classes of our larger communities to grovel in filth and disease, and it is for such chiefly that sanitary laws are wanted, as this class is mostly affected by faulty arrangement in the disposal of sewage. As a result of their deliberations the Committee concluded that to burn or dry up the obnoxious substance was the best plan for getting rid of it It has been estimated that an additional sum of $8,000 would be required for this purpose. But for the Chairman of Finance this depletion of civic funds would have been fixed upon the city for a number of years.

Fortunately, this gentleman, who seems to have very grave doubts of its success, objected to binding the city for any period, so that, as it will be tried experimentally, the Council can at any time withdraw from the arrangement should it prove unsuccessful. We have not learned what is to be done with the residue after incineration, but suppose it will remain a perquisite of the contractor.

If this gentleman wants to convert this material into fertilizers let him do it by any means he may think fit, at his own expense, as long as it is not detrimental to others, but that the city should do it for him we fail to understand.

So far as the object aimed at is concerned, namely, the destruction of *materies morbi*, the plan proposed appears so absurd that we wonder the Medical Health Officer and the better-informed members of the Board did not oppose such expenditure. According to the Medical Health Officer's report there are about 10,000 cesspools distributed throughout the city. Nearly 1,500 of these are annually cleaned out, so that about once in six years each pit is supposed to be emptied. As a matter of fact many of these places have not been emptied for double that time, as the law does not compel removal unless their contents reach within eighteen inches of the surrounding surface. As the danger of these places lies in the poisons they evolve they require to be emptied much more frequently than it is possible to accomplish. Usually decomposition and putrefaction have done their worst in poisoning a neighborhood, and the adjacent subsoil is saturated by soakage from them. Where, then, can be the sense of burning this material after it has polluted the original site of its deposit. Let it be buried in deep pits and covered over with earth when these are full and all further annoyance or danger from it will cease to exist. The Board evidently believe in locking the stable door after the steed has been stolen, for unless there is a little nigger in the fence with a job for some one we fail to understand why any body of intelligent men would favor such useless expenditure.

There can be no doubt of the necessity of ridding the community of these unmitigated nuisances, and if the Board of Health would move for their entire abolition they would exhibit more sense than by trying inefficient incineration experiments. Wherever a cesspool exists there will be found a dangerous focus for the spread of choleraic disorder, especially in children; and should the dread cholera visit our fair city this summer we sincerely hope that no increased energy will be shown in disturbing these disgusting masses. The Medical Health Officer has suggested the only proper course which should be adopted for the disposal of sewage; that is, the general use of the water-closet system and removal by flushing through the sewers into the river. Circumstances favor this mode, as we have a na-

tural drain fall and a large river in front of us to carry it away. Better spend the money in increasing our water supply, than waste it on a fancy. Until health matters become of more importance than at present and a Board of Health is formed independent of the whimsicalities of aldermen but little hope can be expected of an improved sanitation.

PHYSIOLOGICAL EXPERIMENTS ON DIGESTION, ALIMENTATION AND NUTRITION.*

While the diastasic activity of Maltine has been fully demonstrated by chemical experiment outside the body, by almost every known chemist, it has remained a moot point whether diastasic action s not arrested in the stomach by the acidity of the gastric juice. Prof. Haines proves that, while acids in excess will retard, or even destroy diastasic action, yet the proportion in which they exist in the stomach produces an exactly opposite effect. Dogs were selected for the experiments made by Prof. Haines, and, although the gastric juice of this animal is rather unfavorable for such investigation (being of somewhat higher acidity than that of man) results proved that the acid reaction materially hastened, instead of retarding, the conversion of starch. Prof. Haines concludes his interesting report in the following words: "I believe, the digestive action of Maltine "on starch, instead of being stopped by the "gastric juice, is generally much accelerated by "its presence. The idea, therefore, that widely "prevails that malt preparations lose their virtue "in contact with the acids of the stomach is, I "am convinced, unquestionably erroneous. On "the contrary, the acids of the stomach, at least "in the earlier stages of digestion, strongly stimu-"late diastasic action, and, therefore, to get the "best effect from such a preparation as Maltine, it "should be administered as soon as possible after "eating, or even during the meal itself; its action "will then be accelerated by the gastric juice,—it "will have an abundance of time to act on the "starch of the food taken, and, by rendering it "soluble and absorbable, it will remove it from "the stomach in the early stages of digestion, "and, consequently, leave the albuminoids of the "food undisturbed by other substances, to be "more rapidly and more efficiently acted upon by "the pepsin of the gastric juice.

*H. P. Gisborne, 10 Colborne st., Toronto.

BARAVENA MILK FOOD.

We would call attention to this new and valuable food for children, which comes to us recommended by many well known Canadian physicians. We gladly add our own word of commendation for the preparation. It is an absolutely pure compound of specially prepared farina of wheat and barley, in which the starch has been converted into dextrine, combined with pure milk and sugar, so that when mixed with water, as directed for feeding the child, it contains all the casein, butter, sugar, and other mammalian constituents nearest in quality and quantity to mothers' milk of any food made. The analyses of Dr. Edwards and Dr. Ellis, ordered by the Government, are eminently satisfactory.

THE ANNALS OF SURGERY.

We gladly welcome the issue of the *Annals of Surgery*, a monthly publication, to be issued simultaneously in St. Louis and in London, Eng. It is the successor to the *Journal of Anatomy and Surgery* formerly published in Brooklyn, and is the first and at present the only journal published in the English language devoted entirely to Surgery. Judging from its first issue it is to be of a high standard, and it certainly has a large and important field to work in.

LOCAL AND GENERAL.

Our quinquennial small-pox epidemic is now due. When it comes, as it probably will next winter, and has passed, some interesting questions may be answered. Have the vaccination activity lately displayed by our city council and the increased sanitary precautions done much to limit the prevalence of the disease? Have the vaccinated and re-vaccinated resisted to a greater degree the influence of the disease? What sections of the city have suffered most? Unprejudiced replies would furnish a valuable contribution to the literature of the vaccination question.

I understand that the epidemic lately raging north of Belleville has about died out. The Ontario Board of Health deserve credit for the way in which they dealt with this dreaded disease, and to their exertions is largely due the prompt extinguishing of the plague. Some political capital has been sought to have been made out of the action of the Government, but it will probably not amount to much.

So they are going to burn the city refuse. A good way to *purify* any community, but an expensive process withal. If I am not greatly mistaken the contractor will be obliged to apply to the council for aid before the year is out, unless he can discover some way of utilizing the inorganic residue for fertilizing or other purposes. Fertilizers are not popular, in Quebec especially. To settle down on new land, to absorb its phosphates for wheat, use up its silex for straw, and never think of returning any of the borrowed elements of plant growth until the impoverished land refuses longer to furnish the requisite food. This is the preliminary, not to the employment of artificial fertilizers but, to moving West—to more new land.

Even empirical proceeding called "manuring," valuable as it is, is not carried out on most Lower Canadian farms with any system or with any regard to the wants of the particular farm.

We have an example of this in the Verdun night-soil nuisance. Those doctors who were brought up to show what an innocent compound city garbage and fæcal refuse make, had doubtless advanced a step or two in their agricultural strides, but their sanitary education, it seems to me, requires considerable extension.

If the vile odors and the damp exhalations and the water-carried germs which are constant derivatives of exposed night-soil heaps are perfectly innocuous why carry the city refuse so far away as Verdun? Are there no celery beds and cabbage gardens, to say nothing of floricultural patches, within the city limits capable of revival by this effectual means? Surely it ought not to be necessary to prove that a particular set of water-closets contain the microbes of some specific disease before they can be shown to be unfit as a source of fresh fertilizers!

Too much stress is placed now-a-days on the microscope, and not enough on the nasal organs as a detector of disease. Not, as every one knows, that all deleterious substances have a repugnant odor, or that every innocent thing has an agreeable smell, but it may be laid down as a rule that when *in loco natural*, when not chemically separated from their usual surroundings, compounds antagonistic to the organism insult the nerve extremities of the Schneiderian membrane.

Beyond admiring the measures of Dr. Larocque, very little of practical value has been the outcome of the meeting held in the city last Friday to discuss with representatives of the City Council and Provincial Legislature the proper means to be taken regarding the probable visit next year of Asiatic Cholera. Once the disease has gained a foothold it will be extremely difficult to prevent its spread, and the only course open, after using strict quarantine regulations, is to keep the towns and cities clean, to pay strict attention to personal cleanliness, to avoid as much as possible affected quarters, to drink well-boiled and *well-filtered* water and to eat only thoroughly cooked food. It is not necessary to dine, *a la* Klein & Gibbes, on raw cholera cocci.

I presume these latter members of the Anglo-Indian commission are now in England as, from last accounts, they intended leaving India in the beginning of the year. Their investigations have, in my humble opinion, thrown no light whatever on the real nature of the cholera poison. I must admit, however, that it is hardly fair to speak positively until one has had an opportunity of reading their report in full. Their theory as to causation of the disease and their suggestions in the way of its prevention, to say nothing of the still more important question of individual conduct during an epidemic, will be awaited with interest.

According to the *Lancet* (London, Jan. 3rd) a partial report has been sent to the Indian Government, in which it is plainly stated that they do not agree with the views held by Koch. Generally they think that so far no specific cholera germ has been found. 'Not only that, but mucous flakes and other discharges from patients dead from acute cholera have been fed to and injected under the skin of monkeys, cats, rats and other animals, and yet the animals remained normal.

Again the cultivation of the "comma bacilli" of Koch and the mucous corpuscles (with and without bacteria) so frequently found in the intestines of people dead of cholera (and other diarrhœal diseases) did not show that they behaved differently from putrefactive organisms. In the face of this report what shall we of the rank and file tell our patients? To keep clean within and without?

P. A. Laver, M.D.

February 16th, 1885.

REVIEWS.

A Practical Treatise on Massage, its History, Mode of Application and Effects. By DOUGLAS GRAHAM, M.D., Fellow of the Massachusetts Medical Society.

We have read the above work with considerable satisfaction.

It is not an echo of the various articles upon the subject which have from time to time appeared in Medical Journals throughout the country, but is a creditable, systematic and faithful fulfilment of the promise involved in the title page.

Massage just now is as fashionable in the United States as electricity used to be, and we in Canada should try to avoid the extremes to which, doubtless, our American cousins will run. Dr. Graham's work will act as a deterrent in this direction, for throughout the whole 275 pages a wise moderation prevails. Where a trained nurse cannot be had it will be seen, on perusal of Chapter III, how unfair to the patient and to the reputation of the remedy it would be to leave the carrying out of the necessary details to any chance assistant.

Let the medical attendant roll up his sleeves with a determination to allow of no perfunctory work in *his* practice. As, says the author (p. 35): "visits for massage are not more arduous than many visits in surgical, obstetrical and gynecological practice, indeed often less so, besides being much less disagreeable. Physicians daily render service that no menial could be hired to perform. French, German and Scandinavian physicians often apply massage themselves without any thought of compromising their dignity; and when such men as Drs. Brown-Sequard, Weir Mitchell and others have tried their hands at it I do not see why American and English physicians should not make use of it oftener than they do."

CORRECTION.

In. Dr. Mattison's original article in our last issue, page 82, "release" should read "relapse." Next column 25 to 30 grammes, should read .25 to .30 gramme. His name was also wrongly spelled. It should be Dr. J. B. Mattison and not Mattinson.

PERSONAL.

Dr. Francis J. Wilson is spending the winter in the famed Ojar Valley, California. His health has improved markedly since he has taken up his residence in the Mountains of California.

Dr. Osler, late of McGill University Faculty of Medicine, but now of the University of Pennsylvania, sailed for London on the 10th inst., where he will deliver the Gulstonian Lectures, his subject being "The Pathology of Endocarditis. He returns immediately on the conclusions of the Lectures.

Dr. Sullivan, of Kingston, has been elevated to the Senate. The appointment is an excellent one.

Dr. Vineberg is still in New York pursuing his Gynecological studies, to which branch of the profession he intends to devote himself in the future.

We learn that Dr. Wolfred Nelson, of Panama, the first Matriculant of the Medical Faculty of Bishop's College, leaves for his annual holiday in March. This year he intends doing the Republic of Nicaragua, C. A., crossing it from ocean to ocean, visiting its lakes, that are famed for magnificent scenery, the old cities and rivers.

Dr. James Broatch, a Scotch physician, died of yellow fever at Panama in December. His death took place thirteen days after arrival. He had applied for employment with the Canal Company.

Dr. Ponjade of the Canal Company died suddenly in November of congestive fever.

Dr. F. D. Gilbert, of Sherbrooke, has gone to California, for the benefit of his health. If the climate agrees with him it is possible he may decide to remain there permanently.

Dr. O. C. Edwards of Indian Head, N.W.T., has been in Montreal for about a month on a visit to his friends. He leaves for home the end of February. We are glad to see Dr. Edwards looking as if the climate agreed with him.

THE CANADA MEDICAL RECORD.

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CHOLERA.*

A FEW PRACTICAL REMARKS ON ITS PREVENTION,

BY

R. T. GODFREY, M.D.

Having been extensively engaged in the treatment of cholera during its several visitations, it affords me much pleasure to offer the following remarks, which I trust will be found useful in the prevention of this disease. It therefore may not be out of place to state my views of the often-asked question: What is cholera? I believe the disease to be due to the entrance into the blood of a poison, animalcular in character, communicated generally through the alimentary canal by means of the water we drink. This water having been contaminated by this specific poison.

When the choleraic poison finds entrance into the system its germs multiply themselves indefinitely like all other animalcular disease, until nature in making an effort to throw off the disease, pours the serum of the blood into the alimentary canal, and, as a consequence, the blood becomes so thickened that it cannot circulate through the smaller blood-vessels. The circulation is therefore impeded, cramps ensue, followed by collapse and death.

Every casual observer must have noticed that cholera travels inland, along the different navigable rivers and canals; in its several visits to this country it has always followed this course. First going up the St. Lawrence and down the Mississippi, next adopting the opposite routes or by whichever channel the stream of emigration travelled. It has also been frequently remarked that the inhabitants of one side of a river have been decimated, while those on the opposite side have escaped. Along some of our canals it had been so fatal, that men could be obtained with difficulty to open the locks for navigable purposes.

During its visits to this city it was a remarkable fact that what might be called one of the healthiest localities, the east end, where the soil is high, well-drained and gravelly; also along the banks of the river for several miles down, where the banks are high and the locality free from stagnant water the mortality was greatest; caused by the fact that the residents drank the water that was taken from the side of the river, below where the shipping was moored and where the city drainage entered. In 1854 the new water works were completed to the south side of Papineau Square. Below this line the mortality was greatest. In this year three rafts were moored on this side of the river below the toll gate, and two on the Longueuil side; while those on this side lost nine men from cholera, those on the opposite shore did not lose a man.

These circumstances, with many others, have convinced me that cholera is propagated through the water we drink, which has been previously contaminated by diseased dejections from a cholera

* Dr. Godfrey has kindly furnished us with the above extracts from his paper read before the Medico-Chirurgical Society of Montreal, January 26th, 1866.

patient, and I consider that this choleraic poison, when thrown into water increases its contagious power so rapidly as to affect a river for miles down.

Should the cholera again visit this city we may safely predict it will not be so fatal as on former occasions. In consequence of the supply of water from the new water-works being obtained above the source of contamination, it will be confined almost exclusively to persons engaged on the river, and who do not use the proper precautions for preventing their being affected by the water.

Presuming the disease to be taken from the water, we would naturally ask ourselves the question, what is the most simple and efficacious method of making the water fit for use and destroying the poison it contains? In reply I would say, simply, by having all water boiled before using it.

Every householder should have a jug of water that had been previously boiled and allowed to cool standing on the side-board, or in some convenient place ready for use, and should be particular that no water is drank by any individual until it has been thus prepared. Boiling destroys all possibility of any contagion remaining in the water, no matter how infectious the water may have hitherto been. Should the plan of boiling be adopted there will not be the slightest necessity for brandy, whiskey, camphor, sulphur, charcoal or any other prophylactic being put into it.

Before closing these remarks, I may add one more hygienic observation that I trust will be useful. Where the out-buildings are in close proximity to the back of the dwellings, it will be necessary to have a ventilator of sufficient size taken below the seat of the water-closet or carried a sufficient height above the roof to secure a good draught. By observing those simple precautions both you and your patients that are not already affected will be as safe in the midst of cholera as if there were not a case within a thousand miles of you.

Gentlemen, should it be agreeable to you, I shall be happy to read on a future occasion a few observations on the treatment I have found most successful in this disease.

1360 St. Catharine St.,

MONTREAL.

Society Proceedings.

MEDICO-CHIRURGICAL SOCIETY OF MONTREAL.

Stated Meeting, Nov. 21st, 1884.

T. J. ALLOWAY, M.D., 1st Vice-President, in the Chair.

Dr. SUTHERLAND exhibited two pathological specimens.

1. *Myeloid Disease*, involving all the tissues of one thigh, in a girl aged 18. When first seen, the symptoms were those of sciatica; a fortnight later a small lump was felt, which, in another two weeks, had enlarged to double its size. A lance was plunged into it, as it felt like an abscess; only blood came away. About a month after, she was admitted into the hospital; but too late for surgical interference, there being no healthy skin left in the neighborhood.

2. *Heart having warty Aortic Valves.*—This was removed from a man aged 30, a hospital patient, in whose brain was also found softening of the parts supplied by the right middle cerebral artery. About ten months previous to entering hospital he had recovered from an attack of hemiplegia. In this case there was a history of repeated attacks of acute rheumatism.

Abnormalities.—Dr. WM. GARDNER described two abnormalities which he had lately come across in his practice. The first was a case of double uterus, os and vagina, the latter being divided equally by a septum. Patient was a young married woman, not pregnant. The second case was one of absence of the urethra in a sterile married woman. Where the urethra should be is a pit about one inch deep, at the end of which is an opening with a fringe-like border leading into the bladder. The opening was large enough to easily admit the finger into the bladder. She has never suffered from incontinence, except during the past few months, and then only when in the upright position.

Dr. TRENHOLME had lately seen a woman with a double vagina, os and bicornuated uterus.

Idiopathic Neuritis of the Brachial Plexus.—Dr. STEWART showed a well-marked case of this disease. The patient is a man aged 35, and, until seven months ago, when his neuritis suddenly set in, enjoyed perfect health. There is complete

paralysis of all the extensors of the fingers and hand, also of all the flexors except the ulnar, which is only in a paretic state. There is complete loss of the thumb movements. He cannot flex his forearm, neither can he pronate or supinate it. Shoulder movements normal. There is marked atrophy of the paralyzed muscles. The deltoid and the spinati are also in a state of atrophy, but it is slight compared with the wasting of the paralyzed muscles. The paralyzed muscles do not respond to the faradic current. There is both quantitative and qualitative change to galvanism. The A O Z < K S Z, while the A S Z=K S Z. The skin of the paralyzed hand is glossy, and at times presents bluish spots. There is marked anæsthesia in the ulnar region of the fingers and hand. All other parts are perfectly normal in their sensation. Very slow improvement is taking place from galvanism.

Tait's Operation.—Dr. TRENHOLME reported six cases of removal of the uterine appendages, with their results. The operations were made during the year ending April 1st, 1884. The similarity of these cases renders it unnecessary to give details of each, the symptoms being intense pelvic suffering directly connected with the continuance of the menstrual function. In all the cases the ovaries were enlarged and diseased; in some the tubes were also affected. The operations were made without the use of the spray, but the hands, instruments and sponges were cleansed in a weak solution of carbolic acid and water. The ligatures used were of shoemaker's white thread, No. 20, carbolized over night. This ligature has always been the doctor's favorite in abdominal surgery, and although he has tried silk he would not do so again. The plan followed was to use single ply of the thread, and where the tissues to be embraced were more than could be safely included in a single ligature, he resorted to the application of several ligatures, rather than use double or multiple thread. This thread, untwisted, is a safe ligature, never has failed in his hands, and has never given rise to any perceptible irritation, even when as many as forty or more have been left in the abdominal cavity. Dr. Trenholme also discards abdominal bandages, trusting to the deep silver sutures to secure coaptation. Horse-hair is used for the superficial sutures, the wound is dressed with carbolized gauze, and over all two or three strips of strong adhesive plaster are placed to lessen the tension on the sutures. By carefully dividing the sheath of the rectus muscle (on either side), and not wounding the muscle itself, and also by carefully excluding the muscular tissue from the deep sutures (*a la* Goodell), we secure, as well, perfect union by first intention. This was the case with all the reported cases where this plan was carefully followed. In all these cases a slight metrorrhagia occurred on the second or third day lasting several days; also, all the patients suffered for several months afterward from flushes of heat and hot perspiration. In one case the patient had a slight bloody discharge on two separate occasions, of about 3 i. each time. As to the results, cases 1 to 3 have been followed by satisfactory results, the patients being now capable of performing the household duties appertaining to their respective stations in life. In all but one of these cases the cure has been complete, and even in the exceptional one, the return to health continues to advance with progress of time, the chief impediment being due to hernia of the bowel. Cases 4 and 5 were complicated with mental disturbances. No. 4 has not been appreciably benefited by the operation. There is still needed to determine what improvement may yet take place. Case 6 is of special interest. Here suicidal mania followed long-continued disease of the uterine appendages. With the supervention of the mania, the pelvic suffering ceased. Both ovaries were diseased, and their removal has been followed by most gratifying results to patient in every way. Her mind has been greatly improved —no more mania—and her physical condition so improved that she is able to take an active part in the duties of a farm life.

In the discussion which followed, Dr. Trenholme advocated the study of mental diseases in connection with disorders of the generative organs both male and female, and said he believed a great field was opened up worthy of further exploration. He also spoke of the great benefits to society that would result from the castration of tramps and confirmed criminals.

Dr. HY. HOWARD said he believed in a physical cause for mania. In case No. 6, operated on by Dr. Trenholme, anæmia of the brain may have been caused by menorrhagia. He said men have become maniacal the first night of their marriage from anæmia of the brain, being produced by peripheral irritation. Good food, air and exercise will cure such cases. Cases of mania produced by anæmia of the brain are more curable than if caused by hyperæmia.

Dr. GARDNER congratulated Dr. Trenholme on the result of his cases, and on being one of the pioneers of an operation which has attained such a good position in surgery. He had operated in four cases. One, a very difficult case, with numerous adhesions and troublesome bleeding, proved fatal from peritonitis. In two of the remaining three the result was satisfactory, but the recovery slow. The third still suffers very much, probably from pelvic inflammation, set up by a long cold drive on her way home after the operation. There could be no doubt of the propriety of the operation in cases of palpable disease of the appendages, with local symptoms, with or without neurotic symptoms sufficiently severe, and in which other treatment failed to relieve. As to cases with purely neurotic symptoms, aggravated at the menstrual periods, there is room for doubt as to the propriety of the operation. Hegar and other eminent German authorities, at the last International Congress, had declared in favor of it while Spencer Wells and others were opposed to it. The neurotic element, in many of the cases, must be recognized and treated. The successful gynæcologist must also be in some measure a neuropathist. It is probable that certain cases reported cured by this operation might have been spared the mutilation, and cured by a treatment mainly tonic and neuropathic. Every gynæcologist must admit that there are cases of enlarged diseased ovaries in women capable of a good deal of activity—mental and bodily. All his patients had suffered more or less from the disturbances, vascular and other, which attend on natural meno-pause. In none of them had ventral hernia occurred, but he had taken care that each patient was fitted with an efficient abdominal supporter before being allowed to leave her bed.

Dr. ARMSTRONG said he had operated twice for removal of the tubes and ovaries. His first case was a success every way, though recovery at first was very slow. His second case has fully recovered from the operation, but sufficient time has not elapsed to say what will be the permanent effect.

Stated Meeting, Dec. 5th, 1884.

T. G. RODDICK, M.D., President, in the Chair.

Dr. SHEPHERD exhibited a large tumor which he had lately removed from the left parotid region. The patient was a woman aged 47. Tumor appeared as a small lump below the ear four years ago; it increased slowly, but was not painful until lately. The tumor, during the last six months, had grown more rapidly, and had produced some facial paralysis. There was no interference with the circulation. The tumor was partly beneath the sterno-mastoid, and firmly fixed by the parotid fascia. The removal was tedious and difficult, owing to tumor not being very well defined. The external carotid artery was tied, and the fascial nerve had to be sacrificed. The patient recovered rapidly, and had no elevation of temperature. On examination, the tumor was found to be a fibro-adenoma. The second day after the operation an ulcer developed in the cornea, which took some time to heal. This was probably caused by an edge of the bandage coming in contact with the open eye.

Tumor of Bladder.—The PRESIDENT exhibited a cystic papillomatous tumor which he had some weeks previous successfully removed from the bladder. A microscopic section of the tumor was shown. The history of the case is as follows:—Geo. T., age 53, was admitted into the Montreal General Hospital, Oct. 27th, complaining of much pain and difficulty of micturition, and pain over the region of the bladder, with frequent over-distension. Symptoms began ten years ago with occasional difficulty in micturition. Three years ago, noticed blood in the urine for the first and only time. At this time he made water every hour, with pain before the act; pain chiefly referred to the end of the penis and neck of the bladder. Catheterization now became frequently necessary. When admitted into hospital, made water every hour, but from a bladder distended to the extent of a couple of pints would evacuate three or four ounces. There was constant hyper-distension of the bladder, forming a distinct tumor, extending sometimes to near the umbilicus. There was great pain in the left iliac region, especially during the act of micturition, Prostate very slightly enlarged. The bladder was sounded carefully, but nothing definite could be made out. Dr. Roddick thought the case was either one of encysted stone or tumor of the bladder, so decided to explore the bladder carefully, after the manner of Sir Henry Thompson. This he did on Nov. 12th. A staff was introduced, and the membranous portion of urethra cut down upon. The finger was then introduced through the pros-

tatic portion, and almost immediately something was felt. On examining more carefully, Dr. Roddick discovered a pediculated tumor attached to one side of the neck of the bladder. This he freed with his finger-nail and extracted. The tumor was almost as large as a hen's egg. For a few days the man had some elevation of temperature, but now he was convalescent, and was passing his water by the urethra. Dr. Roddick remarked that he had several times explored the bladder as in this case, but that this was the first time he had ever discovered a tumor.

Dr. MOLSON presented to the Society two large calculi which had been lately passed by one of his patients, who had had frequent attacks of renal colic and bloody urine.

Lead poisoning.—Dr. MIGNAULT then read a paper on two cases. The first case was well marked. Patient, a young woman, came under his care at the Hotel Dieu Hospital, suffering from wrist drop, constipation, colic, and distinct blue line of gums. There was also extreme wasting of the extensor muscles, and also of the muscles of the ball of the thumb; this wasting had been rapid. The source of the lead poisoning had been traced to some pickles which the patient had eaten in large quantities three or four times a day, having been advised to do so for loss of appetite. Lead was found in large quantities in the vinegar used to preserve the pickles. There had been several similar cases in the neighborhood where the woman lived which had all been traced to the eating of pickles. In the second case, the poisoning was also due to the eating of pickles. In this case, besides the wrist-drop, blue line, colic, &c., there was marked melancholia and mental depression.

Dr. F. W. CAMPBELL looked upon mental depression as frequently present in lead poisoning. He advised large doses of iodide of potassium to be given—half to one drachm doses.

Dr. GURD explained that the common kinds of pickles were kept in glazed earthen jars before being bottled, and that oxide of lead was used for glazing the cheaper earthenware; this, when brought in contact with vinegar, was dissolved out in the form of the soluble acetate of lead, and so poisoned the pickles.

DRS. GARDNER, L. SMITH and MOLSON, each reported a case of lead poisoning. Dr. Molson's case ended fatally, and delirium was a marked symptom from the beginning. The man had been employed mixing paints for some two months, and the attack commenced with colic, later there was constipation and mental depression, then delirium. The wrist-drop only came on during the last three weeks. Patient died of exhaustion.

Dr. JAS. BELL said that there were two kinds of lead poisoning—acute and chronic—and he had, whilst medical superintendent of the Montreal General Hospital, seen many cases of both kinds. He believed, in the chronic form wrist-drop was a remote symptom, and not accompanied by colic, as in Dr. Mignault's cases. The blue line could be caused by other sulphides than lead. He thought the rapid wasting of the muscles not a common symptom in lead poisoning, and suggested that Dr. Mignault's first case was not one of lead poisoning at all, but due to some trophic changes. It looked very much like a case of polio-myelitis of spinal cord.

Dr. JAS. STEWART asked if the deltoid muscle was affected. He said in any case of paralysis the extensors were the first to suffer, and, last of all, the intrinsic muscles of the hands. If these were affected early, he thought Dr. Mignault's first case might not be entirely due to lead poisoning.

Dr. HY. HOWARD wanted to know how the iodide of potassium acted, and the effect of the lead on the nervous system. He said: It is a remarkable fact that in all cases of muscular atrophy and paralysis of parts from poisons, so much depends upon the poison as to how the nerve centres are attacked. For example, in the case under consideration, lead poison, the highest centres—that is, intelligence—although the lowest organized, is the last attacked; the first being the afferent or peripheral sensory nerves, rendering the parts anæsthetic. Now, because the trophic nerves are paralyzed, they can no longer perform their function; and, in accordance with the natural law of waste and supply, or of evolution and dissolution, it is all waste and no supply, consequently atrophy of the part that has been deprived of its supply. The next stage is the natural consequence of the first, the peripheral nerve lesion—that is, motor paralysis—and why? Because the roots of the motor nerves leaving the spinal cord, as well as the cord itself, are supplied by these trophic nerves, consequently these parts lose their supply, and the waste causes paralysis of the motor nerves. Thus do we account for the atrophy and paralysis of a certain group of muscles from the toxia of lead poisons, and, I have no doubt, for other functional symptoms that we find in cases of lead

poisoning, remembering that all functional symptoms are due to structural cause. With regard to toxia from alcohol, it is a fact that the first organs affected are the highest nerve centres—viz., intelligence. A man first becomes a fool from the poison, than the sensory nerves become paralyzed, and he is anæsthetic—that is general anæsthesia; and the last stage of the poisoning in both is hemiplegia.

Dr. MIGNAULT, in replying, said that the symptoms of the acute and chronic forms might exist together, the one passing insensibly into the other. In the first case the deltoid muscle was apparently normal. He was certain that the muscles of the thumb atrophied early and rapidly.

Hydrochlorate of Cocaine.—Dr. BULLER, on being asked to give his experience with this new local anæsthetic, said:—On the 7th of November I commenced using the new local anæsthetic (cocaine) in operations upon the eye, and have had an opportunity of testing its merits in quite a variety of cases. Under its influence I have performed iridectomy five times, extracted two senile cataracts, removed four tarsal cysts, discision of capsular cataract twice, opening of the canaliculi twice, and operation for obstruction of the lachrymal duct once. I have always used a four per cent. solution. The results have been gratifying, but not entirely satisfactory. The first iridectomy was for artificial pupil on account of a central leucoma of long tanding. Two instillations at an interval of five minutes. Ten minutes after the first instillation, grasping the conjunctiva with fixing forceps caused no discomfort. The operation was performed in the usual way. In reply to my question, "Did you feel any pain?" the patient, an intelligent man, said "No, I cannot say that I did." In iridectomy for lamellar cataract, preliminary iridectomy for senile cataract, and for acute glaucoma, I was equal fortunate. In one case of iridectomy for commencing staphyloma following ulceration of the cornea from purulent ophthalmia, the patient complained considerably of pain during the operation, notwithstanding four applications of the drug at intervals of five minutes. There was in this case an incomplete anæsthesia, ascertained by testing the relative sensibility of the conjunctiva of the other normal eye. Perhaps the still somewhat infiltrated and swollen conjunctiva had been rendered less susceptible to the action of the drug by the recent inflammatory process. In one case of senile cataract, the anæsthesia was all that could be desired; in the other, the patient became restive before completion of the incision, and gave me a good deal of trouble before the operation was satisfactorily completed. In both, the result of the operation was perfectly satisfactory; and I may say that I have not observed the slightest ill-effect from the use of cocaine up to the present time. In one case of discision of a partially absorbed traumatic cataract, repeated instillations failed to produce any anæsthetic effect, and the patient complained of pain quite as much as if no anæsthetic had been used. The same solution had proved perfectly efficacious upon another patient a few minutes previously. It would therefore seem that some eyes cannot be rendered anæsthetic by the use of a 4 per cent. solution of cocaine. For the removal of tarsal cysts, the pain was only trifling after three or four instillations of the solution; so also in slitting the canaliculi, and was certainly diminished even in the operation of opening the nasal duct.

Dr. GARDNER had removed a urethral carbuncle without producing pain by means of cocaine.

Dr. ALLOWAY had opened a large retro-vaginal abscess painlessly with a 4 per cent. solution of cocaine.

The PRESIDENT reported a painless operation upon himself by means of cocaine. He had, in fact, pulled out one of his own double teeth. He applied a 4 per cent. solution by means of two bits of lint for some 15 minutes before "putting on" the forceps. The tooth was firmly fixed, and he only felt a slight pain towards the end of the operation.

Neuritis of the Brachial Plexus.—The discussion on this case (exhibited at the last meeting by Dr. Stewart) now took place.

Dr. HY. HOWARD said: Whether the etiology of this case be idiopathic or traumatic, or, more properly speaking, whether it be due to chemical or mechanical lesion, it is a case in proof of my theory that peripheral, or trophic, or sensory paralysis is followed by muscular atrophy and motor paralysis. This case went to prove the now established physical fact that alterations or change of animal organisms—that is, of structure—creates change of function, and that change of function is necessarily followed by change of conduct. These truisms explain how the sane man of yesterday is the insane man to-day; how the rascal of yesterday is the saint of to-day; the immoral of yesterday the moral of to-day; the irreligious of yesterday the sanctified

of to-day; and how so many people deceive themselves, mistake structural and functional changes for supernatural cause of effect.

Stated Meeting, Dec. 19th, 1884.

T. G. RODDICK, M.D., President, in the Chair.

PATHOLOGICAL SPECIMENS.

Dr. KENNEDY exhibited some inky black sputum expectorated by a middle-aged man, a painter, who enjoys good health. He has been expectorating this black sputum for about seven years; never much at a time, but lately is rather worse. It comes just after a slight cough, and is at first viscid. He has never inhaled carbon. There are over his body several melanotic spots. Dr. Kennedy suggested that he may be eliminating pigmentary matter from the lungs. It was not chemically examined. Dr. Kennedy promised to further investigate this case, and bring it again before the Society in the form of a paper.

Malignant Disease of the Œsophagus, causing stricture.—Dr. Ross exhibited the specimen and related the case:

J. W., aged 54, was admitted to Hospital Dec. 10th, 1884, suffering from a severe attack of acute pleurisy, with effusion, commencing twelve days before. *Previous history*—Difficulty in swallowing for six months previously, beginning with sudden obstruction in swallowing glass of hot spirits; since then was unable to swallow solids, but could readily take liquids; was a hard drinker, and a subject of constitutional syphilis; no family history of cancer. Owing to patient's serious condition, no examination by bougies was made, but he stated that three months before admission Dr. Perrigo had treated him for stricture of gullet, with some benefit; he stated also that he had lost weight rapidly since beginning of illness. Patient, from the first, was very weak, gradually sank, and died on Dec. 17th. *Autopsy*—Right pleura contained 40 ozs. thick, yellow, very turbid serum. Right lung collapsed; surface covered with a thick sheeting of lymph; no pneumonia. Left lung normal. Heart normal. Œsophagus, at level of bifurcation of trachea, presented a large, deep ulcer with shreddy bases measuring three-quarters of an inch by one-and-a-half inches; edges not indurated, but rather excavated, although base is thickened and a small lump of glands beneath base were enlarged and firm, and projected into left bronchus, shewing beneath the mucosa (which is intact) as a firm mass the size of a large bean. No secondary nodules elsewhere. No signs of syphilis. On microscopical examination, base of ulcer showed an epitheliomatous growth, the cells being arranged in columns and nests.

Dr. PERRIGO said he had passed a bougie down this man's œsophagus on two or three occasions, with relief to the dysphagia for a time.

Dr. MILLS said that German investigators had proved by experiments that a band of muscles of the œsophagus or intestines may be excited into contraction and remain so for a long time, like a tetanic spasm of a voluntary muscle.

Dr. SMITH said this patient came to see him about three or four months ago, complaining of difficulty in swallowing and cough. He diagnosed malignant disease, and sent him to Dr. Perrigo.

Dr. MIGNAULT said he had a patient, a nun, who has periodic attacks of dysphagia, which he was always able to relieve by a hypodermic of morphia. His patient, ten years ago, drank by mistake a strong solution of potash. He believes there is an old cicatrix in her œsophagus, which becomes irritated and sets up spasm.

Dr. CAMPBELL said that a duodenal ulcer will at times allow food to pass over it and at other times will not. He related briefly the history of a patient of his who died from hæmorrhage of an ulcer in the duodenum, in whose case these symptoms existed.

Dr. R. L. MACDONNELL read a paper entitled "*A Year's Medical Work in the Out-patient Room of the Montreal General Hospital*," in the course of which he read very many reports in brief of some of the more instructive cases he had met with during the year ending May 31st, 1884, together with remarks upon the clinical features peculiar to the cases noted, as well as to those met with in out-patient practice generally. The paper included more particularly remarks upon three cases of lead palsy, in two of which no distinct history of metallic poisoning could be traced, while in the third, colic and wrist-drop had followed the prolonged use of tinned vegetables. Two patients with locomotor ataxia had presented themselves, and one of tabes in its pre-ataxic stage, symptoms present being recurring gastric attacks, one with hæmatemesis, at first supposed to be caused by alcoholism, followed by temporary derangement of vision (Argyll-Robertson

pupil), slight numbness of the feet, and loss of knee-jerk. There was a history of syphilis in all. A case of primary lateral sclerosis of the cord, in a boy aged 12, was also described.

Fissure of the Anus—Dr. KENNEDY related a case which he was treating by passing a rectal bougie. The use of hydrochlorate of cocaine renders the operation painless.

Stated Meeting, January 9th, 1885.

T. J. ALLOWAY, M.D., First Vice-President, in The Chair.

Case of Hernia, with great hypertrophy (elephantiasis) of scrotum.—Dr T. D. REED showed photographs and gave the following account:—The patient, a French-Canadian, aged 60, applied at the Montreal Dispensary recently for treatment of œdema of left leg. On examination, he was found to have a very large pyriform tumor projecting from the pubis, reaching to within one inch of the patellæ, measuring 14½ inches in length and 30 inches in great circumference. The man had had an irreducible hernia of the right side of several years' standing, and thought the scrotum had been increasing in size for about fourteen years. The dragging of the mass, the estimated weight of which was 14 lbs., on the pubic tissues had resulted in burying the penis completely, which could be traced from a groove on the side of the tumor. Dr. Reed considered the mass to be in the upper third, hernia; in the middle hydrocele; and the lower hypertrophied scrotal tissue. There was a sinus in the solid portion from which exuded a watery fluid. The surface of this part was uneven, and the skin adherent, The patient had no difficulty with the bowels, and the belly was rotund. To urinate, the patient would elevate the mass with the hands. and pushing himself against some object, as a chair back, bring out the glans. The urine was examined for albumen, with negative result. Under treatment, the œdema of the leg diminished. Surgical interference with the tumor was refused. The patient could walk long distances at a moderate pace.

Removal of an enormous stone from the bladder.—DR. HINGSTON exhibited to the Society an enormous calculus removed by him from the bladder by the lateral method. He said his object in doing so at so late a period was in consequence of the advocacy on this and the other side of the Atlantic of the supra-pubic method for stones of large size, an operation which, even with Petersen's modification, he considered a serious one. He said the *Medical News* of Philadelphia had mentioned the removal of a stone weighing three ounces by the supra-pubic as worthy of record; and Sir Henry Thompson, in the *British Medical Journal* for July, had stated; "no incisions can be made in the region which belongs to that operation" (the lateral) "through which a calculus of three ounces or more can be extracted." The calculus Dr. Hingston exhibited weighed five ounces and five drachms when removed in July, 1873, by the lateral method. It was a somewhat flattened ellipse, and measured in breadth, 2¼ inches; length, 3⅜ inches; thickness, 1¼ inches; greatest circumference, 9 inches. It was composed of uric acid, with one end covered with a half-inch coating of phosphates. The patient, a young man, 21 years of age, made an excellent recovery, and returned to his home in Syracuse, in the State of New York.

Dr. WOOD exhibited a man with only one leg. the tibia of which, he thought, had had a piece knocked off by the man's having fallen on a shovel.

Dr. HY. HOWARD said it was difficult to be sure, as everything was healed up, and there was no other leg to compare it with.

Dr. ALLOWAY related the history of a case which he stated was of more interest from its extreme rarity than of serious importance to the patient. The patient, a young married lady, mother of two children, youngest about four years of age, consulted him about one year ago concerning a pain in her right side, backache, and general decline in health. On making a vaginal examination in Sims' position, a large cyst-like, bluish body occupied the whole of the posterior fornix space, and so overlapped the vaginal portion of the cervix and os uteri that it was with difficulty the cervix and os could be at first discovered. The cyst proved to be purely submucous, and its fluid contents separated the mucous membranes from the submucous tissues from a point extending from the os up the posterior surface of the vaginal cervix, and down a short distance on the posterior vaginal wall. At this time there was a slight catarrhal condition of the cervix, but no evidence of there having been ulceration or previous attack of pelvic inflammation. He kept the patient under observation for nine or ten months, and observing no change having taken place in the cyst during that time, concluded that it probably resulted from injury

incurred during the last confinement, and had existed ever since. From its size and position, it was quite possible for it to have acted as a bar to conception during all this time. A piece of the wall of the cyst on the cervix was removed with the scissors, and about an ounce of greenish limpid serum escaped. The fornix and vagina were packed with cotton, and the patient kept in bed for a week. There is a slight discharge of serum yet, and it may require, at some future time brushing over internally with iodine or other irritant to complete the obliteration. The abnormal symptoms complained of at the time by the patient have disappeared. Dr. Alloway exhibited a diagram showing the position of the growth, and said he had never met with a like condition, nor had he been able to find such an one recorded.

Stated Meeting, January 23rd, 1885.

T. J. ALLOWAY, M.D., First Vice-President, in the Chair.

PATHOLOGICAL SPECIMENS.

Broncholiths.—Dr. SMITH showed two small calcareous masses about the size of half peas which had been expectorated by an old man having senile catarrh. He has been expectorating four or five of these daily for the past eight or ten years.

Dr. BELL said he thought these little masses may have come from calcareous bronchial glands similar to some he has met with in the post-mortem room of the General Hospital.

Large Tonsillary Calculus.—Dr. SMITH removed this from a boy aged 10 years. It weighed forty grains and measured 2 by 1¾ inches.

Dr. BELL said he had removed a calculus from Wharton's duct which had caused so much inflammation as to mislead some other doctors into believing the patient had malignant disease.

Uterus with Fibroid Tumor; Tait's Operation.—Dr. TRENHOLME exhibited the specimen and related the case. The uterus was removed, post-mortem, from a woman aged 30, upon whom he had performed Tait's operation on the 7th of this month. She had suffered for years with pain on the left side and dysmenorrhœa in spite of all treatment. An examination revealed a uterine fibroid of the left side, with an enlarged ovary, and the parts about were thickened. Before the anæsthetic was administered a hypodermic injection of 1-6 grain of morphia and 1-1000 of atropine was given. The operation was a difficult one. There was an inch and a quarter of adipose tissue before the sheath of the rectus was reached. When the hand was got in, a membrane was felt, which was perforated by the fingers. The right ovary, twice its natural size, was first removed along with the tube. It was much more difficult to get the left into view. It was removed (not enlarged) with but the fimbriated end of the tube. There was smart hemorrhage, which was, after a time, controlled, and the wound brought together. Peritonitis set in twelve hours after. In forty hours it was thought there might be fluid, so the wound, which had healed completely, was opened, when five or six drachms of pus escaped. The wound was left open and the pulse improved for a time, but she died 76 hours after the operation. She had urinated naturally, but there had been no escape of flatus. She died from peritonitis and septicæmia. Drs. Armstrong, Wood and J. J. Gardner were present at the post-mortem. The uterus was found anteflected, and on its left cornu was a small fibroid tumor.

Dr. J. J. GARDNER, who performed the post-mortem, said there were the signs of a general peritonitis; pus was all over the intestines. Both sides of the omentum were adherent to Poupart's ligament. The perforation made by Dr. Trenholme was seen.

Dr. CAMERON, who assisted Dr. Trenholme, said there were present evidences of previous inflammation, and that a great deal of handling and forcing were needed. The situation of the tumor and the adhesions made it difficult to sponge all the blood out. The fibroid tumor, from its situation, made it at first appear as if they had a double uterus to deal with.

Dr. STEWART asked why a drainage tube was not used.

Dr. TRENHOLME said he had never yet used one. He would have used it in this case, but thought it was not needed.

Dr. STEWART said it was the practice for surgeons who do not use full antiseptic precautions to use a drainage tube. This patient died from suppurative peritonitis.

Dr. HY. HOWARD asked if a surgeon would not be justified in staying his hand from proceeding further when so much difficulty and danger presented themselves.

Dr. WM. GARDNER said that if adhesions con-

traindicted operation, only about half the cases operated on would be attempted.

Dr. ALLOWAY remarked that this case showed how difficult it was to prevent sepsis in cases where old inflammations existed. The symptoms here tally with Emmet's views, viz., that the dysmenorrhœa is due to a parametritis.

Ovarian Cysts from a case of Double Ovariotomy.—Dr. GARDNER exhibited the sacs of the two cysts removed by him from a woman aged 31, unmarried. They were of slow growth and began on the right side. The only distress had been pelvic pain. The right side of the abdomen was distended to about the size of an adult's head. The left tumor was the size of an orange, and the uterus lay between them. The first cyst was easily managed. It was much more difficult to get at the second, as it lay below and behind the uterus in Douglas' fossa, and was adherent to the uterus. It burst, and the contents being a tarlike fluid it was not easy to remove it all. Warm carbolic acid solution was used, but did not dissolve it. The fluid in both cysts was of a dark-brown color, from old hæmorrhages into them. A glass drainage tube was used. Patient died the third day of peritonitis. No pus escaped till the very last. About two ounces of bloody serum came away each day. The operation was performed under strict antiseptic precautions. It is the experience of all that long operations are very fatal. Sir Spencer Wells' percentage of deaths in double ovariotomies is 34.15. Mr. Lawson Tait's figures give a better shewing.

Dr. Alloway exhibited a *decidual cast of the uterus about twenty days old.* The points of interest where the distinctness with which the embryo-formation could be seen through the membranes, and the formation of the decidua reflexa as it arched over the ovum-sac, but which had not been quite completed, leaving a transparent facet looking towards the interior of the uterus and through the membranous walls of which the embryonic cell formation could be distinctly seen. Dr. Alloway drew attention to the evidence this specimen bore towards the correctness of Costa's views in regard to the formation of the decidua reflexa.

A LOCAL ANÆSTHETIC.

Dr. LAPTHORN SMITH read a paper on the use of a mixture of about equal parts of chloral hydrate and camphor as a local anæsthetic. He stated that when placed in the solid form together in a bottle they soon produced a clear, thick liquid, which, when applied on a piece of lint, covered with oil silk, to a painful surface, complete analgesia resulted. He reported three cases in which he tried it with good success. The first was a whitlow of the finger, which the patient refused to have opened. Shortly after applying it the pain disappeared, and three days later it was lanced and the pus let out without the patient, a young lady, experiencing any pain whatever. The second case was a very painful bubo, which completely disabled the patient, a gentleman, from doing his work. The mixture of chloral hydrate and camphor was applied frequently on a piece of lint, with the result that a few hours after the first application he was so much relieved that he returned to his duties next day, and fluctuation becoming evident a few days later, it was opened, the operation causing only about a quarter of the usual amount of pain. The third case was an operation for the removal of a large sebaceous cyst of the face, which was removed after the frequent application of the local anæsthetic for several hours previously by means of a brush.

The incision in the skin was almost painless, but it produced no effect upon the deeper structures to which the cyst was firmly adherent. The action of the anæsthetic is much less marked on healthy than on inflamed and painful skin.

Dr. REED was familiar with the compound. G. E. Saunders of Montreal had shown that this is a simple mixture of the ingredients, and not a true chemical compouud. Dr. Reed would suggest the solution in chloroform as a topical application.

Dr. STEWART had used a mixture of chloral and camphor for neuralgia, but now uses menthol.

Dr. GURD has found an ointment made by mixing half a drachm each of camphor and chloral hydrate to one ounce of lard of great benefit in pruritus.

Correspondence.

OUR NEW YORK LETTER.

A VISIT TO BLACKWELL'S ISLAND. THE LYING-IN HOSPITAL.

SIR,—Would your readers like to go with me to Blackwell's Island? If so, we will take the little boat called the *Wickham*, at the foot of East 52nd St., and land at the home of the pregnant, the abode of those whose sins have wrought their misery, (those affected with venereal disease), the place reserved for those who have violated the civil

code of ethics (the work house), the insane asylum and the pest house for smallpox, etc. I will spare you the visit to the last, and waive the visit to the work house and asylum until another time.

As we enter the obstetric wards we see a very much crowded but clean place, where women are admitted after the 4th month of gestation. Here their urine is examined from time to time and their general health attended to. As they near the time for labor an examination is made by touch and auscultation of fœtal heart to make out, if possible, the position of the fœtus. When labor has actually begun the woman is removed to a solitary ward in a solitary cottage; she is placed in a cot; her abdomen, thighs and external genitals are bathed in a 1 to 2000 solution of corrosive sublimate, her labor, if normal, is allowed to proceed until the head begins to press upon the perineum, when chloroform is invariably administered and the head delivered, between pains if possible. Ergotine is then administered, an assistant compresses the womb over the abdomen, and if the placenta be not delivered spontaneously in twenty minutes, he, by external manipulation, assists in its delivery.

If the introduction of the hand into the uterus were, for any reason, necessary, disinfected though it be, the organ is washed out with the corrosive sublimate solution by means of a fountain syringe. I will say here, however, that their last rule, although not expunged from the written regulations which govern the ward, is frequently transgressed, from the fact that several cases of salivation have occurred from the procedure. If, however, no such introduction of the hand has been resorted to, or if instruments have not been necessary, a piece of lint moistened with corrosive sublimate solution is placed over the vulva, over that a piece of oiled silk, and then oakum wrapped in a napkin is applied, so that it will absorb the discharge. This napkin is attached to the bandage and changed three times a day. Half a teaspoonful of fluid extract of ergot is given three times a day for a week, otherwise no interference is made if the discharge remains odorless and the temperature normal. If any signs of septicæmia develop the uterus is washed out with a solution of carbolic acid, using the fountain syringe and a single catheter. These injections are repeated every 3 or 4 hours until all septic symptoms have disappeared. Peritonitis is treated by morphia, and the application of the coil through which iced water passes. If at the end of nine days the woman is doing well she is returned to the ward from which she came, where she remains in bed another week. The cottages in which the woman is placed after confinement have beds for five or six patients. These cottages are disinfected every two weeks; they are closed air tight and ten pounds of sulphur are burnt in each. After twenty-four hours they are fit for use.

I give these bare facts without any comments, more than to say that they about represent the status of the profession in this city at the present time, in this particular. And when I tell you that they have reduced the death rate (which has been as high as 15 per cent.) to almost nothing you cannot doubt but that there is *something* in obstetric antisepsis.

We will now pass into the venereal ward, not, however, so much for the purpose of learning the signs, symptoms and pathology of venereal diseases (for there has been little change in the teaching on those points), as to acquire a knowledge of the latest and most approved methods of treatment. As far as I can learn, more importance is attached to irrigation of the urethra than to any other remedy for gonorrhœa. A bottle containing a gallon of warm water is placed near and slightly above the patient. A catheter (about No. 6 in size) is introduced to the membranous portion of the urethra. To this instrument a tube passing from the faucet of the bottle is attached, and the water is allowed to run *ad libitum*. I think that the longer this is kept up and the oftener it is performed the more sure and speedy will be the cure. Chancroids are, as of yore, cauterized and dressed with iodoform. The chancre of syphilis is simply kept clean and dusted with calomel, and if the sore heals kindly no internal remedies, save such as might be indicated to put the patient's system in good condition to resist the disease, are used until other symptoms present themselves, and then the favorite remedy is the famous "pil. duo" which consists of one grain of sulphate of iron and two of blue mass, given three times a day. When, again, these symptoms have subsided the medicine is dropped. To make a long story short, instead of two years of mercury the symptoms alone are treated. There is much logic in this plan of dealing with syphilis, but all will admit that it is easier to carry it out in hospital than in private practice, especially when it is known that the much-dreaded rash may be prevented or masked by continuous treatment from the date of the initial lesion.

Blackwell's Island is well designed by nature for the purposes for which it is employed.

winds and the waves are nature's best scavengers. In my next letter, although I shall probably date it among the fogs of the English metropolis, I shall try to give you an idea of the treatment of wounds, surgical and accidental, as carried out by the principal New York surgeons.

W. P. S.

122 East 27th St., New York.

Progress of Science.

PALATABLE PRESCRIPTIONS.

Dr. John L. Davis at a recent meeting of the Cincinnati Medical Society read an interesting practical paper, which we find in the *Lancet and Clinic* of that city. We reprint below the most important portions of the article. Dr. Davis says:

It is with the view of suggesting agreeable and appropriate vehicles for some of the most repulsive drugs that I offer the following prescriptions. They are the result of a great many experiments and most of them I have used in practice and can recommend as the best combinations possible without modifying the drug in such a way as to affect its action. I have attempted to marshal these unruly drugs under something approaching order; though I confess the classification is far from being a perfect one. A few drugs of each class will suffice to illustrate how the whole class may be improved.

1. *Bitter Drugs.*— These comprise a very large class of unpalatable medicines: the climax of bitterness is reached in the cinchona bark. The best prescription for masking the taste of quinine is:

℞. Quiniæ sulphatis..... gr. xxx.
Tinct. aurant. cort. recentis..... ʒ ij.
Ext. glycyrrhizæ fl..... ..... ʒ vj.
Syr. simplicis..... ʒ j.

Or it may be given with the aromatic syrup of licorice. Simply chewing a piece of licorice root before and after taking the quinine will very effectually hide its bitter taste. The same methods for administration apply equally well to most other bitter medicines. In the *American Journal of Medical Science*, Dr. Samuel Ashhurst of Philadelphia describes an agreeable method for the exhibition of cinchonia. He uses the alkaloid rather than the more usual sulphate; for, while being equally soluble in the stomach, it is less so in the saliva, and consequently its bitterness is less marked than that of the sulphate. His prescription is:

℞. Cinchoniæ.....gr. j.
Sac lactis..... .....gr. iv.
Sodæ bicarbonatis.....gr. v.

The soda renders the alkaloid less soluble in the mouth, while the sugar of the milk gives it an agreeable, sweet taste. Children take this powder without the least aversion.

The thick, viscid elixir of taraxacum is also a valuable vehicle for the administration of medicines. And finally it may be said of these, as of all medicines, that if taken very cold, or if a piece of ice is taken into the mouth immediately before the medicine, the objectionable taste will be less marked.

2. *Salty and metallic drugs.*—A large class of unpalatable drugs is included under this head. The best prescription containing iodide of potassium is the following:

℞. Potassii iodidi..... ʒ iji.
Tinct. aurant. cort recentis..... ℥ j.
Ext. glycyrrhiz. rad. fl .... ʒ j.
Syr. simplicis..... .....q. s. ad ℥ iij.

Of this each teaspoonful contains five grains, and the iodide is so perfectly disguised that persons who have been accustomed to its use fail to recognize its presence. For this combination I am indebted to Mr. Julius H. Eichberg, the skillful and efficient druggist of the Cincinnati Hospital. The vehicle is eligible also for the administration of the bromide of potassium. A syrup of coffee is highly recommended to hide the taste of the iodide—fifteen grains to the ounce. The same vehicle can be used for the bromide, except in cases where the stimulant effect of coffee is to be avoided.

A simple and somewhat effective way for administering the iodide and bromide, as well as salicylic acid, is in milk—ten grains to the ounce. Another mode for giving these drugs is to use as the vehicle slightly alkaline carbonated water, either natural or artificial.

The syrup of the iodide of iron is a useful medicine, which is best given simply with the fluid extract of licorice root: this is preferable to the ordinary succus glycyrrhizæ. A medicine peculiarly disagreeable to many persons from its bitter salty taste is magnesium sulphate. The following prescription offers an elegant means for its administration:

℞. Magnesii sulphatis..... ʒ ij.
Acidi sulphurici.....gtt. v.
Glycerinæ.....gtt. v.
Aquæ.....q. s. ad ℥ j.

Half of this, in a glass of water constitutes an agreeable dose of an ordinarily repulsive substance. By the addition of a drop or two of mint the mixture becomes not only palatable but attractive.

3. *Astringent drugs.*—Tannin is the representative of a class of remedies repulsive by reason of an astringent, acrid taste. This may be materially improved by the addition of sugar of milk and aromatic powder. I have also ordered it with powdered licorice, which materially improves the taste. Salicylic acid may be given

in powder the same way. When alcohol is not objectionable, the following combination will be found useful and agreeable:

℞. Acidi salicylici..... .....gr. viij.
Spir. vini Gallici..... M xl.
Syr. acaciæ,
Syr. limonis.....aa. M x.

Chloral, besides having an acrid taste, is burning and penetrating; and these qualities make it a most difficult substance to disguise. I have seen some alleged palatable prescriptions of this drug, in which the only thing disguised and perfectly hidden was the aromatic vehicle, the taste of the chloral being apparently reinforced and concentrated. The best combination containing this drug is a suggestion of Mr. Eichberg. It is thus:

℞. Chloral hydratis.....gr. v.
Glycerinæ..... .... ʒ j.

Or, it may be still furthur improved thus.

℞. Chloral hydratis.....gr. xx.
Glycerinæ..... ʒ ij.
Ext. glycyrrhyz. rad. fl. . ...ʒ j.

Each drachm of which contains six and two-thirds grains of chloral. These same vehicles may be used in giving croton chloral hydrate, a remedy which is remarkably beneficial in some cases of facial neuralgia.

Another convenient and agreeable vehicle is syrup of raspberry, a drachm of which covers the taste of three or four grains of chloral.

4. *Ethereal drugs.*—The syrup of raspberry is also valuable to conceal the disagreeable character of sweet spirits of nitre; when taken with this syrup in soda water, the drug is not tasted.

Sulphuric ether is best given on a lump of sugar; chloroform has a hot, burning taste, which is best modified by an emulsion; or it may be given with a large quantity of simple elixir.

5. *Odorous drugs.*—A certain class of drugs is disagreeable more from odor than from taste. Such are carbolic acid and creasote, very repulsive to some persons. The unpleasant character of the former is fairly hidden by simple elixir, five grains of the acid to the ounce. The best way to give creasote is with simple elixir or syrup and Madeira wine.

Iodoform has a very objectionable odor, and one method for disguising it is the addition of tannin. The compound has a less disagreeable odor than iodoform, but this improvement is made by destroying the iodoform by the formation of a different substance. Such prescriptions of course are improper. The offensive odor may be removed by the addition of various substances, without affecting in the slightest the physiological action of the drug. The best combinations are the following:

℞. Iodoformi..... .... 3 j.
Nitrobenzol.....gtt. iij.

℞ Iodoformi..... 3 j.
Ol. myristicæ.....gtt. ij.

℞ Iodoformi..... 3 j.
Eucalyptol.....gtt. iv.

All of these prescriptions are excellent; the disagreeable odor is perfectly removed; while the properties of the iodoform remain unaltered. Some samples of these combinations prepared two years ago show as yet no trace of the odor of iodoform, though the activity of the drug is unimpaired. The odor may also be hidden, though less effectually, by oleum myrciæ (oil of bay) and tonka bean, or its active principle, coumarine.

Nitrobenzol constitutes an agreeable cover for the odor of turpentine. The following is a prescription which I have used:

℞ Ol. terebinthinæ..... M x.
Mucilage acaciæ syrupi..... .... m xxv.
Nitrobenzol .....gtt. j.

In some cases turpentine may be best given in pill form. And the same may be said of many of the resins and gums.

Assafœtida is a substance which the Persians use as a condiment, to give their food a pleasant taste. Personally I should prefer to take it in a gelatine-coated pill, which is the least disagreeable method for its administration.

Given in liquid form, it is an exceedingly repulsive drug, whose odor and taste cannot be effectually covered. By the addition to the tincture of a drop or two of oil of orange, and a few drops of aromatic sulphuric acid, its nauseousness becomes slightly less obtrusive. This is somewhat preferable—if there can be a choice in repulsive things—to the ordinary emulsions and mixtures containing licorice, tincture of orange, mint, etc.

Ipecac has a repulsive, acrid taste, even as syrup. If, however, instead of sugar, glycerine is used in making the syrupy mixture, the objectionable features are materially improved.

6. *Oils.*—Such oils as that of copaiba are best given in capsule. But some persons are so constituted as to be unable to swallow capsules, and for such our only refuge is found in emulsions, such as that of bitter almonds flavored with an essential oil.

Castor oil is most easily given with an equal amount of glycerine, and a drop of oil of cinnamon to the ounce. The oil is not recognizable, and the mixture has only the hot, sweet taste of glycerine, agreeably modified by cinnamon. This is the best way to give this valuable medicine to children. It is also readily taken by children when mixed with coarse brown sugar, and having the mass made firm by placing it for a few minutes on ice(*Berl. Klin. Wocheg.*)

A method for its exhibition suggested by Dr. Potain *(Le Practicien)* appears to answer the purpose. A spoonful of orange juice is poured into a cup, then the oil is added, and finally another spoonful of orange juice. When swallowed the presence of the oil is completely unrecognizable.

The following elaborate prescription has been

suggested: In a tumbler pour six drachms syrup of sarsaparilla, then add ten grains of bicarbonate of soda, and stir. Add then one fluid drachm of a saturated solution of tartaric acid; the reaction will cause a heavy, viscid froth. Then pour an ounce of water gently down the side of the glass, so it will reach the bottom with the least disturbance of the other ingredients. Finally, the oil is to be added without agitation, and the mixture taken. It is undoubtedly perfectly palatable, but its preparation demands an unreasonable amount of work, and it is not practicable. Another very palatable mixture is open to the same objection:

℞. Ol. ricini ..... ʒ j.
Ol. anisi,
Chloroformi ..... aa gtt. x.
Shake, and add mucilcg. acaciæ. ʒ ss.
Shake again, and add water..... ʒ ss.

By far the simplest and most eligible palatable prescription containing castor oil is that made with the addition of glycerine, with or without cinnamon.

A very nauseating and unpalatable medicine is cod liver oil. Many attempts have been made to cover its taste. One of the easiest methods for its administration is with the yellow of an egg, a drop or two of an essential oil, and half a glass of sweetened water; or it may be given with glycerine and whiskey, or glycerine and compound spirits of lavender. The oil may be much modified, and, to some tastes, improved, by the addition of ten drops of the tincture of eucalyptus globulus to the ounce.

The following method for making a palatable preparation is worthy of consideration and investigation; I have not tried it, but the theory appears plausible:

Take of Cod liver oil ..... 1,000 parts.
Coffee..... 50 "
Animal charcoal..... 25 "

Place in a well-closed flask, and digest on a water-bath for one hour. Set aside for three days, occasionally shaking; then filter. The oil is then said to have an agreeable coffee flavor and a pleasant odor. (Carlo Pavesi.)

The medicines I have mentioned are those ordinarily most difficult to administer. I have spoken of them as we have them, without attempting any other improvement than can be made by the addition of various substances. But in most instances our medicines may be made still more agreeable by concentration, and by the use of the active principles, as the alkaloids of drugs.

And in some diseases, too, it will be found that medicine may be made not any less discomforting to the patient, but of greater benefit, by giving it in smaller doses than are now common, though more frequently repeated.

A CLINICAL LECTURE ON REMEDIES FOR ASTHMA.

Delivered at the City of London Hospital for Diseases of the Chest.

By JOHN C. THOROWOOD, M.D., F.R.C.P.,
Senior Physician to the Hospital.

As a matter of observation and experience I find that persons, from the high to the low, are disposed to regard asthma as a complaint to be endured rather than cured. In support of this statement I can bring forward the sayings of paupers in the workhouse, and of more favored people enjoying time-honored titles and living in the best parts of London. Reflect, however—Are we worse off in our chances of curing asthma than we are in respect of many other chronic diseases? Is epilepsy often cured? Then gout again—"Strange thing," people sometimes say, "but the doctors can find no cure for gout." Pulmonary consumption is not so curable as we could wish, and there are, to my present knowledge, cases of skin diseases that baffle all the best therapeutic talent in London and many other large towns. The curative action of drugs is more critically tested in chronic than in acute disease. Diseases of an acute type, such as pneumonia, measles, &c., usually tend to a natural recovery, while with chronic disease the tendency is just the other way. Chronic disease slowly grows, as it were, into the very constitution of the patient, so that the disease appears to become a part of his very being, and he gets to regard it as his companion for life, accepting gratefully such remissions as circumstances or the art of the doctor may from time to time obtain for him.

Spasmodic asthma, though by no means a dangerous disorder, is cruel in the way it deals with its victims. Asthmatics are usually persons of ability and strong nervous energy, and often in the midst of daily and successful work, are seized upon by the asthma, and after a hard day's work the sufferer has to pass a night sitting up in bed, gasping for breath, and inhaling all manner of smoke and vapor in order to obtain ease for his respiration. In the morning generally the spasm remits, and then comes the routine of daily work after the preparation of such a night as that I have portrayed.

Therapeutic experiences in asthma can be obtained in an interesting form from the life-histories of some of the physicians of years long passed away. Floyer, who wrote on asthma in 1717, and who seems to me to have known almost as much of the mechanism and nature of the complaint as we do now, was a great sufferer. His medicines were chiefly of the evacuant class; of anti-spasmodics he does not appear to have had a very high opinion. General Gent, on the other hand, who in 1802 introduced the use of stramonium smoke as a means of relief for his asthma, believed in its anti-spasmodic power as formerly, and resorted

to it so freely that he is said to have fallen a victim to the excessive use of his favorite remedy.

An intimate knowledge of pathology does not appear necessary or essential to guide us to a selection of a remedy for asthma. When we review the large number of remedies that find and maintain a good repute with the public for the relief of the asthmatic fit, such as Himrod's powder, Joy's cigarettes, the ozone paper of Huggins, and the like, we do not find the inventors of these much-prized remedies to have been men distinguished in pathological research. Nevertheless, it will help us in choosing a medicine to bear in mind that asthma is a spasm of the bronchial muscles which surround the smaller air tubes, with simultaneous congestion of the bronchial mucous membrane. The expiratory character of the dyspnæa in the case of old asthmatics with rounded chests should also be borne in mind. Very often such a patient will volunteer the statement that the difficulty is to get the air out of, not into, the chest. Sometimes we see spasmodic asthma coming distinctly as a secondary affection upon bronchitis. This may be called bronchitic asthma. I briefly indicate these distinctions, inasmuch as they bear on the matter of remedies for asthma with which our present purpose lies. The climatic treatment of spasmodic asthma can be soon disposed of in the purely spasmodic form of the complaint where the patient goes to bed in excellent health, and then is taken about three or four in the morning with sudden constriction of the chest, so that he has to sit up with his head bent down on his knees and gasp for breath, the best advice to give is to tell him when he comes to a place in which he finds he can sleep peacefully all night to stay there, for it is notorious that the finding of a fit climate for these cases is a matter of pure experiment. Many curious tales are told of the vagaries of asthma in seizing severely on one asthmatic on the very same spot where another is rejoicing in having escaped from his harassing enemy. Dr. Birkett relates the curious case of two asthmatics, one of whom could only breathe in London, the other could only breathe at Norwood. If they attempted to go, the one to Norwood the other to London, they were stopped on the journey by asthma. And very curious they were both stopped at the same spot, which was Camberwell Green. Individuals whose asthmatic seizures are caused by or essentially associated with, irritative bronchitis, have their line of climatic treatment more definitely marked out, for I believe I am correct in saying that these cases of bronchitic asthma will do well, and find their lives lengthened and more enjoyable in a place possessing a mild and equable climate, and in air that is not dry and exciting. Torquay and Bournemouth, Ventnor and Hastings are good resorts; especially during the Autumn and Spring months. I have heard of the case of a patient who was attacked by a severe bronchitis with much spasm during a bad London fog. He got no relief till he went to St. Leonards. While there he coughed up much dark sooty-colored expectoration and recovery went on rapidly. The soothing air of St. Leonard's relieved the spasmodic state of the bronchial muscles; they were enabled to act rhythmically and so to clear the lungs of all the foulness of the London air that was clogging and oppressing them.

When we seek to relieve the urgent dyspnœa of asthma by inhalations, we generally use substances that have been found to act locally as relaxors of spasm. Chloroform cautiously employed is pre-eminently useful in giving prompt relief to the asthmatic fit. It is superior to and less dangerous than the nitrite of amyl, but the danger is that the patient becomes too fond of the chloroform, for the way in which I have known chloroform consumed by asthmatic men and women, has more than once caused me real alarm and apprehension. If nitrite of amyl be employed two or three drops should be inhaled from lint, and if the breathing be noted to become slower and deeper it will be a sign that the inhalation is likely to relieve before long.

Iodide of ethyl, or iodic ether was introduced as a remedy for asthma in 1870, by Mr. Huette, Our experience of its use in spasmodic asthma at this hospital has been favorable. Six or eight drops of the iodic ether may be inhaled from a piece of lint held on the palm of the hand. A former clinical assistant, Mr. MacDonald, was able to detect the presence of iodine in the expectoration, and also in the urine of those who had inhaled the iodic ether. In the dyspnœa met with in fibroid phthisis, and in old-standing bronchitis the iodic ether certainly is beneficial.

In the case of Annie E., æt. 16, from Tunbridge Wells, we found the sudden attacks of asthma to be decidedly relieved, and the frequency of their recurrence diminished, by the inhalation of ten drops of iodic ether as soon as the breath difficulty commenced. The cough was also relieved, and expectoration facilitated. The note speaks of nitrate of pilocarpine, gr. 1-24th, lobelia, and citrate of caffeine, given internally, not appearing to afford an amount of relief equal to that obtained from the iodide of ethyl.

Burning nitre paper fumes are so well known as a time-honored remedy for the asthmatic fit that I need say but little on the subject. The more sudden and spasmodic the attack the greater is the chance of relief from the nitrous fumes; and these must be furnished abundantly till the atmosphere becomes unbearable to a person whose lungs are healthy, for then it is that the asthmatic sucks in the medicated air with comfort and relief. Analysis of the nitrous vapor has proved in it the presence of cyanogen, nitrogen, carbonic acid and ammonia; whether the specific action of the paper when burnt is due to one of these bodies more than another I cannot say.

The nitre paper has been medicated in various ways and the addition of some iodide of potassium as in the ozone paper of Huggins is an advant-

In cases of bronchitic asthma where there is some amount of actual bronchitis present in the air tubes, burning nitre paper often aggravates the distress of the patient. It is in these cases where iodic ether answers much better than the nitrous fume, and where preparations of arsenious acid or phosphorus internally are very effectual remedies. Of anti-spasmodic powders and cigarettes for inhalation there is an endless variety known to most of those present. Slade's stramonium cigarettes, and Savory and Moore's datura tatula cigarettes and powder, answer well in cases where there is much spasm and great inspiratory dyspnœa, as if the lung was closed and wanted opening. Belladonna and lobelia powders are also valuable anti-spasmodics. The celebrated Himrod's powder, so much used for asthma, does not seem to contain stramonium, probably it contains belladonna. The objection to these fuming powders and cigarettes is the dryness of the throat and headache, which so commonly follow their employment.

Of internal remedies I am bound to speak well of caffeine, usually, given in the form of what is known as citrate of caffeine, though chemists say there is no definite combination between the citric acid and the caffeine. Dr. Fowler, of Wakefield, first drew my attention to this citrate of caffeine, in 1878 on account of its marvelously curative action in his own case after the failure of an immense number of remedies. The citrate is best given in dose of 1 to 5 grains dissolved in warm coffee, and it very seldom fails to give relief to the asthmatic paroxysm. We want more investigation as to the mode of action of caffeine. M. Leblond says it regulates the heart, augments its force, promotes diuresis, and is safer and more certain in action than digitalis. In poisonous dose it is said to paralyse the medulla. While I find much said in English and French works on the value of caffeine in cardiac dropsy, I do not find anywhere mention made of its great power in relieving asthma. (*a*) I have heard of as much as sixty grains of citrate of caffeine, taken by mistake, producing muscular tremors, vomiting, and rather alarming symptoms, which were relieved by digitalis. The only case in which I have actually seen serious symptoms, follow on the use of caffeine was in the case of a young medical man, who had severe attacks of dyspnœa, resembling asthma. To him I gave one grain of citrate of caffeine, the effect was at once to relieve his breathing, and he was rejoiced at the speedy action of the medicine; but soon there came on a most deadly faintness, from which he was with difficulty restored. At the time one could not help thinking the caffeine might have been the cause of this faintness, but more extended observation of this case showed me that without warning very alarming fits of syncope at times attacked this patient, and I heard that he eventually died in one of these seizures. The case was one of those that now and then come under notice as cases of asthma, but which are really indications of profound nervous lesion. Curious to say that three cases of nervous dyspnœa that have thus come under my notice have all been in the cases of medical men. Two died and one is yet alive, but hemiplegic on his right side.

The second edition of Dr. Hyde Salter's work on asthma was published in 1868, and I have vainly looked in it for mention of arsenious acid as a remedy for asthma. In 1869, among out-patients at this hospital, I accomplished some striking and durable cures of bronchitic asthma by means of arsenic in the form of 2 or 3 minims of Fowler's solution. Arsenical preparations give vigor and support to the respiration, and enable people to ascend mountains without confessing the toil by a single sigh; hence one judges that in many forms of asthma arsenical medicines may prove advantageous.

One case taken from several will give the indications for arsenic. Feb. 12, 1883.—C. W., æt. 14, has been asthmatic from the age of 2 years. He coughs violently, and when the asthma takes him his lower chest is drawn in. Tongue large, throat congested. Pulse 88. Respiration harsh and loud. Heart normal. At Kimberley, near the Orange River, he was quite free from asthma. He was ordered twice daily 2 minims of Fowler's solution with 2 grains of iodide of potassium in water. On March 19th I heard that he had not required any medicine for the last fourteen days, and seemed perfectly cured. The liquor sodæ arseniatis is a preparation that may be given with much hopefulness in bronchial and bronchitic asthma. I have never seen any unpleasant effects follow on the employment of arsenic, but when there is hæmoptysis and weakness of the heart I have found it fail to give relief. I wish time would allow me to enlarge upon the effects of arsenic eating, for they are curious. At Salzburg Arsenic Works the men who stand the fumes best eat arsenic daily with their food. A gentlemen who came to learn assaying at the age of 17 years was advised to eat a bit of arsenious acid every day to enable him to bear the exposure to the vapor. He continued the practice up to the age of 50. "Twice (said he) I tried to give up my arsenic, but on each occasion I experienced faintness, sweating, loss of sleep, and violent palpitation of the heart. Inflammation of the lungs followed; I was laid up for nine weeks, and should have died had I not returned to my arsenic." Arsenic-smoking in a pipe is known as the Chinese remedy for asthma. Cauvin (*Lancet*, 1861), reports the case of an asthmatic lady, who in an experience of twenty-five years found no remedy equal to ¼ of a grain of arsenious acid three or four times a day, mixed in a stramonium cigarette.

I pass over many remedies for asthma, well known to most, to mention a new one that we have recently been employing—the Euphorbia Pilulifera from Australia. A decoction of the dried plant is made in the proportion of ½ oz. to Oj. of water

(*a*) "Medical Society's Proceedings," Vol. VI., 405.

and when cool 100 mm. of spirit of chloroform are added. Of this decoction the patient takes a wine-glassful three times in the day. When it does not agree you may expect depression and faintness to show themselves. In bronchitic asthma, with emphysematous lungs, the euphorbia seems of some service. I have notes of four cases in which we have tried it. In the case of Georgina M., æt. 20, living in London, and for three months an in-patient at the Middlesex Hospital on account of extremely severe paroxysms of asthma, with tendency to congestion of lungs, we found, for a time, the euphorbia of service, while caffeine, belladonna, and an immense number of other medicines, including iodide of potassium in 15-grain doses, had no curative effect whatever. Emily K., æt. 32, from a marshy part of Essex, was twice in Victoria Park Hospital for bronchitic asthma, with occasional paroxysms of severe dyspnœa, when she turns livid in the face. The euphorbia certainly answered well here. It kept off the asthma, while the cough and muco-purulent expectoration diminished under its employment. It did more good than any other medicine, and she left the hospital on December 29, 1883, very much relieved.

James B., æt., 40, with bronchitic asthma and tendency to congestion of lungs, was admitted October, 1873. He said he had taken every remedy that he had seen advertised for the cure of asthma. Euphorbia suited him and gave relief, he did not seem equal to a combination of iodide of potassium and carbonate ammonium. His asthma and bronchitis were of nine years' duration, due to cold taken in his employment as a coachman.

There are cases, met with in persons advanced in years, where the chest is round and barrel-shaped; it is extra resonant on percussion, and this resonance extends very low down in the chest, giving the impression that the diaphragm does not move up and down as it ought to do. The diaphragm is mechanically pressed downwards by the over-distended lungs, and cannot rise to attain its proper position in expiration. A line or zone of congested capillary vessels can sometimes be traced on the skin along the line of attachment of the diaphragm. It is in very confirmed cases that I have noticed this sign present.

On auscultation we scarcely hear any inspiratory sound. The lungs are so distended that but little air can be taken in with inspiration. With this stagnant condition of respiration the patient complains much of coldness in his extremities, his lips and nose look dark and congested, and his general condition is one of dulness and apathy. At intervals the bronchial muscle is thrown into a state of rigid spasm, and thus attacks of asthma come on, and greatly distress the patient. Ordinary expectorants and sedatives are of very little use as remedies in this form of asthma, but I have seen much good done by liquor strychniæ or pills of extract of nux vomica. The liquor may be given in doses of three to five drops, with dilute phosphoric or hydrochloric acid. In cases where respiration is much prolonged, and expectoration of phlegm difficult, I have seen much good done by the strychnia and the nux vomica.

In the case of a patient lately under my care with barrel-shaped, almost circular, chest and frequent asthmatic seizures, we were able, in consultation with Dr. Cayley, to try the effect of the inspiration of compressed air from Waldenberg's spirometer. The benefit was slight, and the trial of expiration into rarefied air of no benefit whatever. Subsequently I learned that the inspiration of oxygen gas had proved useful; but what did more good than anything else was going through a course of severe manipulation at the hands of a celebrated Swedish practitioner. The abdominal muscles were well rubbed and shampooed, and thus their action as muscles of expiration was roused and stimulated. The diaphragm also powerfully brought into play, with the result of curing the asthmatic seizures and bringing improved appetite and increased vigor to the circulation, so that the patient felt warm and cheerful.

Of the treatment of hay asthma and summer catarrh I have not much to say. The pollen of grasses and of flowers appears to be the cause of this complaint, and various respirators have been invented to protect the nostrils against the invasion of the pollen. A snuff, made by rubbing well together twenty or thirty grains of iodide of sulphur and 200 grains of powdered liquorice root, has seemed to me decidedly of service in some cases. The powder must be made as fine and impalpable as possible, and then a little of it may be snuffed into the nostrils. Gargling the throat and bathing the nostrils and eyes with a very weak solution of potassium permanganate in water is often very comforting. It is well to commence with five drops of the BP solution of the permanganate in a tumblerful of water, and the strength can be increased by degrees.

Of internal remedies I believe belladonna to be the best when the defluxion from the mucous surfaces is very profuse and distressing. From three to six mm. of the succus belladonnæ should be taken in water every four hours, and such experience as I have had of this remedy has been certainly encouraging.

THE NEW SPECIFIC FOR RHEUMATISM.

The New York *Medical Journal* publishes a paper by Dr. H. H. Seelye, of Amherst, Massachusetts, on the use of the oil of gaultheria in the treatment of the various types of rheumatism, the observations having been made in three of the wards of a large hospital where special advantages were offered for testing the merits of the drug.

The medicine can be administered in various ways, the most agreeable being in capsules, either alone or mixed with salicylate of sodium, or in soda-water as a flavoring. We gave it in an emulsion of ten minims of the oil to half a dram each of glycerine and water. If the patient had be-

sick for some time, and the inflammation of the joints was extensive, we usually ordered two drams of this mixture every two hours during the day and every three hours throughout the night. Under this treatment almost invariably within twelve hours the patient would express great relief, and by the end of twenty-four hours the pain and swelling would have left all the joints, except, perhaps, a little in some one articulation, and there would only remain a slight stiffness of the previously inflamed parts, due probably to the distension of the adjacent tissues by reason of the swelling, which had now disappeared. Before or about this time, however, the patient would generally complain of some ringing in the ears and deafness, similar to that produced by large doses of quinine, but usually not so markedly annoying in character, and he would be apt to have some headache or a sensation of fullness in the head. These symptoms occurring synchronously with the cessation of pain, tenderness, and swelling from the joints, and with a sudden fall of temperature to the normal, were generally considered an indication for diminishing the dose of the medicine and it was therefore usually reduced to one dram every three or four hours, according to the relative amount of the cerebral and joint disturbance. If too much of the medicine was still given, its evil effects became more marked. The patient would now experience a loathing of the drug; nausea and vomiting would set in; the deafness, tinnitus aurium, and headache would increase; the muscles of the hands, limbs, and face would become tremulous; the countenance would be flushed, and the whole body be bathed in a profuse perspiration; and at length the patient would become delirious. These extreme symptoms, more or less modified, were observed by us in perhaps eight or ten cases of acute articular rheumatism, but they almost invariably occurred in patients who had been hard drinkers, and in whom the attack of rheumatism was most probably due to some unusual exposure to cold or wet while in a state of intoxication. In the large majority of cases only a little ringing in the ears was complained of, and this would soon cease upon the diminution or complete withdrawal of the drug. There were also very many cases in which no evil results were ever manifested, but the patient speedily recovered without experiencing any annoyance.

There would always be a certain number of cases which would yield promptly to the remedy, so far as relieving the acute suffering, reducing the inflammatory swelling, and lowering the temperature were concerned, but still a little pain on motion, or a slight stiffness, would hang about some one joint, usually the shoulder, wrist, finger, or ankle, and it would be several days longer before the patient could say that he was perfectly free from pain and felt well. Again, there would be comparatively few patients who, after being speedily relieved, would be up and moving about the ward for some days without taking any of the medicine, and then there would come a sudden relapse, and the pains would return, though with less severity, in one or two joints. But here a renewal of the remedy usually induced a rapid recovery. In order to guard against such relapses and to be sure that the cure was permanent, it was our custom to keep the patient in bed and to continue the medicine in smaller and less frequent doses for at least two days after all symptoms of the disease had disappeared, then to retain him in the ward for two or three days longer without giving him any medicine but tonics, and then, if there was no return of the symptoms, to discharge him, cured. In a very large majority of cases the patients themselves asked, about this time, to be discharged, because they felt so perfectly well.

The one variety of rheumatism in which this remedy was found to be most efficient and rapid as well as permanent in its action, is what is commonly known as acute articular rheumatism; the more acute the attack, the more joints are involved, the more inflamed and swollen they are, and the higher the temperature, so much the more speedy and complete is the cure apt to be. It is, in fact, in these worst of all cases that the remedial power of this drug is most wonderful to see. Yet it must not be supposed that it is of insignificant value in the more subacute forms of the disease; for here too it almost invariably diminishes the severity of the suffering, and after a time often effects a radical cure.

In the chronic forms of rheumatism the action of the remedy seems to be limited in most cases to merely giving prompt relief from the acute pains and swellings attending exacerbations of the malady, and for this purpose it is very efficient. But, like most other drugs, it is powerless to correct the permanent damage done to joints which have long been undergoing morbid changes in their fibrous and cartilaginous structures. The same statement is true, as a rule, in regard to those other obstinate forms of the disease known by the various names of gouty rheumatism, arthritis deformans, rheumatoid arthritis, gonorrheal and syphilitic rheumatism, etc. In the active stage of all these some temporary relief will usually be afforded, while a complete recovery under its influence is very rare.

Muscular rheumatism, lumbago, coxalgia, sciatica, and the like, seem to be variously influenced. Some patients, after the medicine is begun, experience almost immediate relief, while others do not seem to be benefited at all. As regards the frequency of cardiac complications developing under this plan of treatment, it is certain that the liability to them is not increased.

HAY FEVER.—VALER. ZINC AND ASSAFŒT.

Dr. Morell Mackenzie considers pills containing one grain of valerianate of zinc and two grains of assafœtida each very valuable in hay fever.—*Med. Chron.*

THE CANADA MEDICAL RECORD

A Monthly Journal of Medicine and Surgery.

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MONTREAL, MARCH, 1885.

THE BOARD OF HEALTH.

Since our last issue a new Mayor has been elected for this city. This gentleman, we are pleased to learn, has given considerable prominence to the necessity of dealing more effectually with matters affecting public health. The Board of Health has also acquired a new chairman, an appointment which we believe is endorsed by the Medical Profession. No member of the Board is better fitted to carry out intelligently the oversight of this department, and therefore we expect to see an improvement in its general management. In this connection we would mention having received from the Medical Health Officer his reports of the mortality of Montreal. From one of those reports we copy the following extracts:

"A fruitful cause of contagious diseases, and we may say of all zymotic diseases, as well as of the diseases of children, is to be found in the privy vaults, the most part of which are placed too close to dwellings, opposite doors and windows. These vaults are made of planks which become loose, and rain water readily flows into them, thus favoring the decomposition of their contents.

We know that human excreta contains a great quantity of sulphur and phosphorus, and that these two substances form, with the hydrogen of the water, sulphuretted and phosphoretted hydrogen, two very deleterious gases, the diffusion of which takes place abundantly in houses. We are aware that the stools of patients affected with contagious diseases, and especially with typhoid fever, contain a great many germs of contagion. Therefore, as long as these vaults are permitted to exist we should not be astonished at the prevalence of contagious diseases.

But it may be remarked that the contents of a great many of the vaults flow into drains. This is very true, but it is to the detriment of public health; for pits emptying into drains connect with the latter at a certain distance from the bottom, the consequence being that a large quantity of the solid part of the matter remains at the bottom, and the pits thus become an incessant cause of nuisance. The question of privy vaults is difficult to solve. During the Washington Sanitary Convention, held on the 10th December last, this question was the subject (although seeming an abject one to the eyes of the vulgar) of a very useful discussion. It was then resolved that yard privy vaults should be done away with, and the system of water closets adopted as the safest guarantee to public health. We should then consider this question with the greatest solicitude, as tending to decrease the death-rate of the city and to prolong the greatest boon we possess—life.

To solve this question in a definite manner we would suggest that:

1. That the system of water closets be adopted in every street in which public sewers exist. This measure may not be immediately put in force, but should be in the near future.

2. That all yard privy vaults be emptied and disinfected within three months from the present time, and, if possible, filled up and replaced by a system which would allow the removal of the excreta twice a week. This object can be accomplished by using the already constructed wooden privy; a tub, bucket or any other vessel, which could be easily removed, being placed under the seat."

These extracts should not be lightly passed over by the Board, although, from the apparently slight attention generally given to the Officer's reports we fear they will. The Medical Health Officer has gained the respect of his confrères for his indefatiguable exertions in improving the sanitary condition of the city, and if the Board had more often heeded his suggestions and given him an efficient support in the past very many needed reforms would now have been accomplished.

PRIVY-VAULTS.

In Professor Pepper's System of Medicine, now being published by Lea Brothers & Co., is an article upon Drainage and Sewerage by George E. Waring, jr., the accomplished engineer of sanitary drainage, at Newport, R.I. The following extract will be of interest, showing his opinion of privy-vaults.

" Privy-vaults are the sole reliance for the disposal of fœcal matter, and often of chamber slops, of 95 per cent. of the population of this country and of Europe as well. It is curious in examining the recommendations of public health officers and the requirements of local boards of health, to observe the uniformity with which this most important subject is passed over, with the prescription that the vault shall be tight, sometimes that it shall be vaulted over, and sometimes that it shall not be within a certain small number of feet of a boundary line, or of a drinking-water well. These prescriptions are most absurd. It is safe to say that of the millions of privy-vaults in this country, not more than hundreds are really tight; that a still smaller number are so vaulted over as to prevent the free exhalation of the gases of decomposition; that those which are so vaulted over are in all respects of worse sanitary effect than those which have freer communication with the air, and that their possibilities of evil reach many times farther than the limits of distance usually required to intervene between them and the well or the neighboring property. In view of the universality of their use and of the completeness with which modern communities are inured to their presence, it seems almost hopeless to attempt to secure a proper realization of their great defects. They are always the seat of the foulest and even of the most dangerous decomposition. They taint not only the air and the soil, but the water of the soil which goes so often to feed our sources of drinking water and their local stench is of itself sufficient to sicken all who have not, by daily and lifelong habit, become accustomed to it. Taking the country at large, farmhouses and village houses, as well as the dwellings of cities, it is not too much to say that the best sanitary service that can be rendered by those interested in the removal of causes of ill-health would be in securing the abolition of those barbarous domestic appliances. In many ways the cesspool is as bad as the vault, but in some respects the vault is *facile princeps* as a public and private nuisance of the most annoying and dangerous character. Wherever a public or private sewer is available, wherever disposal by irrigation is possible, and wherever even the crudest attention can be secured for an automatic or simpler earth-closet, the strongest effort should be directed to the absolute inhibition of the common privy-vault."

In another connection Mr. Waring refers to these nuisances as " the *fiendish* privy-vaults which prevail so generally." Such strong language, irom a man so well qualified to speak with authorfty, should compel the attention of our local Board. We earnestly commend this important matter to their consideration.

The London *Engineering Times* says that: "Cholera, if it comes to us next summer, will be a good test for our sanitarians and our sanitary science. If the dread disease comes it will be curious to watch its effects upon our sanitary associations and boards of health. The health officers who are medical men may be depended upon to do their duty, as they are always ready to do in any emergency. The *Sanitary News* points out that it only needs time to show what those boards of health which are composed of non-professional men will do for their cities, in the line of intelligent prevention and courageous hopefulness. There will be much fright, nervousness, and foolishness on the part of the population. Whether the preventive work of our sanitarians can overcome the effects of it all is a question to be answered next winter."

SEWAGE FUEL.

Dr. C. H. Vonklein, of Dayton, O., has invented a chemical process which he claims will disinfect sewage matter and turn it into a useful fuel. Different chemical salts are used, the most expensive being nitrate of silver. The doctor states that two dollars' worth of such fuel is equal in heat-giving properties to a ton of coal. It is made into brick-like pieces, without odor, and gives out a strong blaze. As the Doctor will not patent his process here is a chance for our local boards of health to furnish cheap fuel to the poor.

PREVALENCE OF MEASLES AND WHOOPING COUGH.

From the fact that measles is a manageable disease, and its mortality slight, may be ascribed the little attention shown to its existence as an epidemic in Montreal. From inquiries, and as a result of our own experience, such it is. All through the past winter season the number of cases of which the writer is cognizant has been somewhat extraordinary, co-existing with whooping cough, which has also attacked large numbers. In very many cases children were affected with both at the same time. The mortality of measles, even when complicated with whooping cough, has been so slight as to cause no alarm, and many families have not thought it necessary to get medical advice or treatment. Pneumonia as a sequence has prevailed, but without very serious consequences. Both disorders apparently began in the south end of the city and gradually spread northward where the greatest number are now to be found. We were inclined to consider the cause of its assuming an epidemic form to the coldness of the winter, obliging householders to close their dwellings and deprive themselves of free ventilation, the atmosphere being thereby vitiated, depressing the vital powers of the young, together with intercommunication at school accounting for its spread. We find, however, that other cities have had a like visitation. In New York during the past four months there were reported 2,153 cases of measles, with 402 deaths, or nearly one death in every five cases. This is a large death-rate, but we presume that the reported cases formed but a small portion of the actual number that occurred. We have estimated that there must have been over three thousand children laid up with measles in Montreal, and so appreciably has this been felt by the attendance at the schools that public attention has been drawn to it. From December 1st to March 1st the number of deaths by measles was 91, and of whooping cough 17. No deaths from measles occurred during October and November.

Local and General.

The recent meeting in the Recorder's Court to consider proper quarantine for inward-bound vessels from cholera-infected ports, gave timely warning to the Government and the citizens.

It now remains to be seen whether the suggestions will be acted upon. The history of cholera and its travels plainly shows that the disease can be warded off our shores if the Executive be fully alive to the dangers of the situation, and if they will carry out in practice what experience has proved to be effective in such cases.

I wish I had room to give the whole of the article on therapeutic evidence, published in a recent number of the *Therapeutic Gazette*, by R. T. Edes of Harvard. However here are a few of the observations which will, I am sure, find an echo in the hearts of most of us: "One observation of recovery under any given treatment of any disease which is usually curable by many different plans proves absolutely nothing as to the positive value of such a treatment. It only goes so far to show that it is not fatal; and it may be that such observations can be considerably multiplied without gaining a great deal in force.

How many plans of treatment of pneumonia have been built upon series of cases terminating favorably in from seven to ten days, and yet such a result proves absolutely nothing as to any positive value in the treatment. Negative value they may have, for it is possible to do much worse."

An old medical friend of mine, noted for his Hibernicisms and odd sayings, remarked to me one day: "I tell you that when there are many successful cures for a disease, there is really no specific treatment for it." If I were asked to formulate a rule by which to test the real curative value of a remedy I should say: where the average result of the treatment to be tested is in a thousand cases better than the average result of the "expectant" or hygienic treatment, the remedy tested has positive therapeutic value, and deserves a place in a Pharmacological text book.

I wonder what a Christian Scientist M.D. (or, for the matter of that, a Homæopathic or Hygienic M.D.,) would do if called to attend a case of cholera morbus.

Intestinal cramp is not a thing that readily yields either to the influence of the mind, the tenth dilution of arsenicum or the regulation of the diet. In the present and empirical state of hings a hypodermic injection of certain anodyne drugs will be found more efficacious.

But to return to Prof. Edes: "When observation as to the effect of new drugs in the cure of disease is to be considered, the first thing wanted is a diagnosis. The great feats of therapeutics are performed by those who trouble themselves little about this trivial point. Witness the results of sulphate of copper in cases of croup, supposed to have been "membranous"; or of sulphate of mercury in the same disease "if the doctor be called early enough." Anybody can make wonderful cures if he can have the naming of the disease without criticism, but if enquiries be pushed far enough the diagnosis may be found even more wonderful than the cure.

Think of the success of homœopathy in "diphtheria," of the cures of Bright's disease diagnosticated by pain in the back and a deposit of urates in a cold chamber-pot. See the certificates of clergymen in the religious papers. Count the cancers cured by condurango."

A patient of mine, after having been treated for some months without success by a graduate (Heaven save the mark!) of the Christian Science College of Boston, proposed to the Spiritualistic medico that he shall offer himself up as an acceptable sacrifice upon the altar of a science which is not exclusively Christian, and allow a pin to be thrust under his thumb-nail so that she might, seeing him suffer no pain, have increased her faith in the curative powers of mind! This modern disciple of Gautama (for Christian Science is, in my opinion, but a poor attempt to revive some of the most objectionable parts of Buddhism) declined to allow this *experimentation crucis* to be made upon his vile body, and his visits abruptly terminated.

How true are the following sentences: "The earliest observation (of a new remedy) are almost certain to be favorable." "We all know the sanguine man whose therapeutics are those of the advertising pages, and who considers himself wide-awake and progressive on that account; and we know the other man who never believes anything as long as he can help it." "Accept the opinions of each, and print them both—if we have room enough—but give cases, too, that we may know which to believe next time."

In the above-mentioned article I fear Prof. Edes has not sufficiently considered the busy practitioner who endeavors at odd moments of leisure to extract the grains of wheat from the bushels of therapeutic chaff that fill the store-house of every medical periodical. On the whole, I would say, let the enthusiastic optimist and the sceptical pessimist fight the battle, while the cool-brained independent sits on the fence and watches the conflict, and when the smoke of battle has cleared away he will find that probably neither was exactly right; that the truth lay somewhere *between* them, if perchance there were any truth really worth contending for.

The excision of a hard glioma from the upper part of the fissure of Rolando by Mr. R. J. Godlee, is a grand clinical and physiological triumph, and although the patient has since died his death has not been in vain. The operation was suggested by Dr. Hughes Bennett, and was followed by relief from the lancinating pains in the head, vomiting and convulsions affecting the limbs—the most annoying of the symptoms—which indicated disturbances of the hand, leg and eyelid centres.

This case proves with what accuracy diagnosis of obscure cerebral lesions, thanks to vivisection, may now be made. Whether we shall ever be able to follow up our increased diagnostic powers by corresponding contributions to surgery of the brain remains to be seen.

In the meantime it is not to be expected that when medical remedies have failed we shall sit with folded arms and allow a cerebral tumor to make life intolerable when it is possible to gain even temporary relieve from the symptoms by the removal of the cause.

I have often heard the question of the ownership of the prescription discussed, but I never knew it to be so practically considered as lately when an order for a pint of gin given by a Connecticut doctor was retained by the patient (?) who had it duplicated many times.

Our "separated brethren" in Halton might take a leaf from this man's book, and so do away with the necessity of getting an order for their daily drink repeated.

Dr. S. Weir Mitchell's "In War Time" is out, and is well worth reading. It is quite a differen sort of book from Miss Jewett's "A Country Doctor," inasmuch as it deals more particularly with a wayward specimen of the male M.D., and does not touch the question of female practi tioners.

I wish in his next essay in the novel line that the author will give us, in the same graphic style, a more pleasing, more attractive hero than Dr. Wendell.

After all, the United States Governments, Federal, State and Municipal, have done and are doing next to nothing to provide for the probability of a cholera epidemic. As the intercourse between the countries is very intimate, we are closely concerned in such action, and we would be clearly justified in shutting ourselves completely off from a country which neglects to do what it can to prevent such a dire calamity as a visit of Asiatic cholera.

General Grant's days are evidently numbered. The disease began as a foul and painful ulcer on the base of the tongue, progressed rapidly, and has destroyed the right anterior pillar of the fauces and part of the tonsil. There is also enlargement of the anterior cervical and sub-maxillary glands. The microscopical examination of fragments removed from the growth show the characteristic "nests" of epithelioma.

The patient is thin and anæmic, and yet in spite of the pain and the other distressing symptoms accompanying the disease he heroically works away at his memoirs of the great war.

Our City Council has decided to employ two medical men to do the public vaccinating. Their hours are to be the same as those of other city officials,and they will receive the magnificent salary of $600 per annum.

I hope any corporation that expects men to give practically their whole time to this important work for such a consideration will succeed in obtaining the necessary amount of work for them to do. Either they will not keep the hours laid down,or else they cannot hope for private practice.

P. A. LAVER, M.D.

MONTREAL, March 18, 1885.

OBITUARY.

WILLIAM BRAITHWAITE, M.D.

Mail advices from England announce the death of the well-known English physician and surgeon, William Braithwaite, the founder of *The Retrospect of Medicine*, who died at his home in Leeds on January 31. *The Yorkshire Post* of February 2 contains the following:

He was the oldest medical practitioner in Leeds, and in his large and varied practice he was esteemed on all hands, both on account of his great knowledge and his sympathetic and kindly disposition. Dr. Braithwaite was born in 1807, and was therefore in his seventy-eighth year. His health for some time past has been such as to cause serious apprehension on the part of his family and friends, and his death on Saturday was not altogether unexpected. He was brought up by the Rev. Richard Hale, at Harewood Vicarage, and was apprenticed to the eminent surgeon, Mr. Thomas Teale, and afterward to his equally eminent son, Dr. Thomas Pridgin Teale, so that he pursued his medical curriculum under exceptionally favorable circumstances. He also studied at St. George's Hospital. The deceased gentleman began practice in Leeds on his own account in 1830, and filled the post of honorary surgeon to the Eye and Ear Infirmary and lectured at the Leeds Medical School on the diseases of women. Though occupied in the management of a large practice, he found time to add materially to the literature of his profession. In 1840 he began a medical work which has since become widely known. Its title is *The Retrospect of Medicine*. It is published half-yearly, and has now reached its ninetieth volume. It is republished in America, where it is widely known and as highly valued as here. During the last few years his son has been co-editor with him of this journal. He married a daughter of Mr. James Beardoe, of Ardwick Green, near Manchester, by whom he was survived. He also leaves three sons.

In 1840 Dr. Braithwaite's half-yearly *Retrospect* was republished by Daniel Adee, at $1 per annum. At that time there were only two medical publications on this side of the Atlantic. Subsequently, by the gradual enlargement of its pages, the price for *The Retrospect* was increased to $3. In 1850 *The Retrospect* became the property of Stringer & Townsend, from which year, by an agreement with its editor, advance copy of his work was received in this country in time to be issued simultaneously with the London edition, for which an annual royalty was allowed. W. A. Townsend, successor to Stringer & Townsend, has continued the publication to the present time, with a constantly increased circulation and popular demand. In May, 1881, Dr. Braithwaite wrote to his American publisher the following:

I little expected about forty years ago that I should live to see my eighty-second volume and that it still maintains its popularity. I am now seventy-four years of age, but feel uncommonly well, thanks to being a total abstainer from alcohol for nearly thirty years.

A letter just received by Mr. Townsend, dated February 3, from Dr. James Braithwaite says:

I grieve to have to inform you of my father's death, which occurred on January 31 last. He died without any suffering and from failure of the heart, which had been noticeable for twelve months previously. I shall carry on *The Retrospect* with the assistance of Dr. A. G. Barre, assistant physician to the Leeds General Infirmary. I have done all the heavy work of the book for twenty-five years, that is, all the writing.

It will be seen *The Retrospect* will be published, as before, under his editorial charge, assisted by able colleagues. Dr. James Braithwaite's name has appeared on its title-page connectedly with his distinguished father's for a quarter century.

REVIEWS.

Transactions of the College of Physicians and Surgeons of Philadelphia. Volume Seventh, Philadelphia. For sale by P. Blakiston, Son & Co.

This volume shows that good work has been done during the year by the members of the College of Physicians and Surgeons of Philadelphia. It contains sixteen papers and discussions thereon. All are of more or less interest, and show that much attention has been devoted to their preparation. We would suggest to the Editorial Committee of the College the advisability of having the leaves of future volumes cut.

A Practical Treatise on the Diseases of the Ear, including a Sketch of Aural Anatomy and Physiology. By D. B. St. John Roosa, M.D., LL.D. Professor of Diseases of the Eye and Ear in the New York Post Graduate Medical School and President of the Faculty; Surgeon to the Manhattan Eye and Ear Hospital; Consulting Surgeon to the Brooklyn Eye and Ear Hospital; formerly Professor of Ophthalmology in the University of the City of New York, and Diseases of the Eye and Ear in the University of Vermont; formerly President of the Medical Society of the State of New York, etc., etc. Sixth Edition, Revised and Enlarged, pp. 718. New York: William Wood & Company, 1885

The fact that the American profession has called for six editions of this work in eleven years is sufficient proof of its high merits. The work has been favorably received in Great Britain and Ireland. The sixth edition is of the same high standard of its predecessors. The work is of a decidedly original character, conclusions being based upon an experience derived from over twelve thousand cases. It is fully illustrated, and will serve as a clear and reliable guide to the general practitioner, having charge of ear cases, as well as to those who devote themselves especially to that subject.

A Theoretical and Practical Treatise on the Hemorrhoidal Disease; giving its History, Nature, Causes, Pathology, Diagnosis and Treatment. By William Bodenhamer, A.M., M.D. Illustrated by two chromo-lithographic plates, and thirty-one woodcuts. pp. 297. New York: Wm. Wood & Co., 1884.

This is a very complete and excellent work by one who has written a good deal on the diseases of the rectum, and who is entitled to speak with authority concerning the hemorrhoidal disease.

The author introduces a short and interesting Hebraic history of the disease, showing it to be the oldest mentioned in ancient history. It is mentioned in the Fifth Book of Moses under the name of Emerods, as one of the punishments of the children of Israel for their disobedience.

The pathology of the affection is clearly described, the author holding that the commencement of the disease is in the vessels of the rectum. The coats of these vessels first becoming diseased, and then the sanguine flexion occurring as a *consequence* of this weakened condition of the walls of the vessels and not as a *cause*.

Under the head of Etiology, the influence of heredity, temperament and climate, etc., etc., as predisposing, and of diet, constipation, mode of dress, etc., etc., as exciting causes, are very fully discussed.

The subjects of diagnosis and treatment are particularly full, explicit and complete. The advantages of the different methods of surgical treatment are compared, that by ligation as performed by Mr. Allingham being favored. The different modes of excision and injection are carefully explained in detail. The book is well worthy of a place in every medical library.

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VALEDICTORY ADDRESS.

Delivered on behalf of the
Medical Faculty of Bishop's College
to the Graduating Class of 1885,
By
A. LAPTHORN SMITH, B.A., M.D., M.R.C.S. ENG.,
Professor of Botany.

GENTLEMEN GRADUATES:—

The Faculty has this year conferred upon me the honor of addressing some farewell words on their behalf, to you, the gentlemen of the Graduating Class of 1885. I shall not detain you long, for I am well aware of your impatience to set loose your hopeful barques upon the flowing tide which is about to bear you on to fame and fortune, in that near future on which you have so often looked with dreaming, longing eyes. I am glad to have the pleasure of being the first to congratulate you on your success and to welcome you to the ranks of the profession.

In the remarks which I am about to make I would speak to you as those whom we have treated as fellow-workers rather than as pupils in the past, and who are now our colleagues and younger brethren—to whom we would, ere parting, give some kindly-meant encouragement and advice. For, owing to the somewhat limited number of the students attending this young but vigorous school, you have occupied an unique position, and had unusual advantages here. Your professors have become personally acquainted with each one of you, and your varying capacities and needs, and were thus enabled to raise you when you fell and strengthen you when you were weak. Some, alas! who began with you, have fallen out of the onward marching ranks, but this has been from no fault of their professors, who sympathize with them in their misfortune, and hold out to them the hope that another year's study will bring them up to the standard which you have attained.

Becoming, as you have, so well acquainted with your teachers and with each other, you have developed a strong *esprit de corps*, for which this school is noted, and of which we have frequent proofs, by receiving letters from former students now occuping high positions in different parts of the Globe. We have done the best we could for you, in the time at our disposal, which was all too short to impart the immense and constantly increasing mass of information, which every well-informed medical man is bound to possess. We have brought you this far, but you must continue your great unknown journey through life alone, and stand or fall on your own merits. You have passed your final examination in this College, but you have yet another and a longer one to pass, which will begin with to-day, and only end with your life—I mean the great examination before the public. But if you really have assimilated the knowledge imparted to you, and which we believe you to possess, you need have no fear as to the result.

I well remember the day, nine years ago, when I stood in a position similar to that you now occupy, and the feeling of pride and exultation I experienced, when I was welcomed by my late awe-inspiring professors as a man and a brother, and a full life-member of our noble profession. I may also tell you, in confidence, that I felt, as you

probably feel now, that I knew a great deal more than most, or at least as much as any of them. You will probably retain this opinion until you begin private practice, when you will commence to realize how much you have yet to learn, and I may add, the sooner you realize it the better, or, in the words of St. Paul, "If any man think that he knoweth anything, he knoweth nothing yet, as he ought to know."

Now that you have received your degree you belong to a profession which, if you rightly esteem the honor, entitles you to the highest position in society. The widow of one of Montreal's former most prominent medical men told me not long ago that in this country, where there is no hereditary aristocracy or nobility, the learned professions constituted the only aristocracy we had, and that among them none were more deserving of the first place than the one to which you now belong. But you must not think that this position is heaven-born, or that your degree and diploma are anything more than certificates; that you have mastered a certain amount of difficult technical knowledge. The title of M.D. which you have received to-day only confers a high position upon you, because the great majority of the honorable men who have borne it before you have raised their profession to that position by the high moral tone of their character and by their devotion to duty. And just as soon as the profession as a body ceases to be self-sacrificing in action, pure in character, honest in purpose, and noble in aspiration, it will no longer obtain or deserve the high esteem in which it is now held. There may at any time be a few black sheep in it, but they will generally be valued at their true worth, without in any way detracting from the reputation of this profession as a whole.

Each one of you is bound to do his share towards upholding its honor and integrity. Hardly anything that you can do will conduce more to this end than the strict observance of the etiquette which exists among medical men, the rules of which are embodied in the code of ethics, which is not a species of trades-unionism, as the public seem to think, founded for the purpose of protecting the business interests of the Doctors. St. Thomas was once asked for some rules of religion, when he replied in the famous sentence: "Love God and do what you will," and in like manner if you were to ask me to sum up the code of ethics I might reply: Be a gentleman to your brethen and the public and you cannot err; you will do to others as you would have others do to you. So important do I consider this sometimes misunderstood qualification of being a gentleman that it has often seemed to me that it would be alike in the interests of the profession and the public that some test or guarantee that he is one should be devised and exacted from a candidate before allowing him to begin the study of medicine. In the words of the poet:

> Who misses or who wins the prize—
> Go lose or conquer, as you can;
> But if you fail, or if you rise,
> Be each, pray God, a gentleman.

Next to that there is another desideratum, which is often lost sight of, viz., that medical men should be gentlemen of culture, either in art, science or literature. The very title of Doctor supposes that he is learned; and learned not only in his own profession, but in all the allied sciences, and certainly as a body the profession is generally acknowledged to be composed of well-informed men, many of them occupying the highest rank in the army of scientific workers. Much of their learning has been acquired after they have been passed and stamped, instead of being possessed of it when it would have been of most use to them, viz., before beginning their medical studies, as I think it should.

The University of Laval has an old-fashioned way of encouraging intending medical students to make themselves generally well-informed before beginning the study of medicine, and that is by teaching them for something like half price if they have already graduated in art, science and literature. And since I have been engaged in teaching, some five years, I can quite understand why such a difference is made; for it is just twice easier to teach phyisology, for instance, to a student who is familiar with natural philosophy than one who has had no scientific and classical education, beyond having his head crammed full of a jumble of words he hardly understands, during a few months previous to his commencing the study of medicine.

It is true you will have an opportunity of cultivating your minds during the next few years which generally have to elapse before the public have discovered your abilities. But this point brings me to some words of encouragement which at the outset of my address I promised to give you. Although, as you are probably aware, for the the first year or two you will have very little practice; you must not feel annoyed or discour-

aged at this, for it is quite natural that people should prefer those who have already attended them or their friends, and of whose reliability they have thus had some opportunity of forming an opinion rather than try some one of whom they know nothing. This however, is not an unmixed evil, for, as I have already said, you have great need of a few years of freedom from the care and anxiety of a busy doctor's life, in which to cultivate your minds. Besides this, while a student you have had no time and will have none when a busy practitioner, to enjoy social pleasures, yet in the few years between these two stages of your life you will have the leisure for, and cannot better employ a portion of it than in social intercourse. Although the medical student is proverbially gallant, yet during his few years of existence he has been thrown more in the society of his jolly, rollicking companions than in that of gentle ladies; and there is no way that I can suggest more likely to refine the manners than to frequent the society of refined women. This is all the more important as, throughout the whole of your profesional career, the ladies will be your best friends; in fact, they have it in their hands to make or mar you, and woe betide you if you incur their displeasure. And so I would recommend you to devote your evenings for the next few years to extending the circle of your lady friends.

Do not be discouraged by those who tell you that the profession is overcrowded; there is now, and always will be, room in the profession for well-educated, hard-working, self-denying men; indeed it is just where it seems most crowded that such a man has the best chance of getting on. But there is little or no room for the half-educated, or the indolent, or the self-indulgent; for them the profession *is* overcrowded, especially in the cities, and their only chance of success is to start in some country place where they will have no competition to contend with.

While holding out every encouragement to those who are beginning practice, there are a few things of which I should forewarn you, and first, if you are going to begin in a large city, you must not expect a large practice all at once. It takes time for the public to become aware of the fact that you are ready and willing to attend them, and after that it takes longer still for your turn to come around to get a chance of showing your ability. The rich have not the inclination, and the poor have not the means, to find you out, and you cannot advertise. Although this may seem hard at first, yet in the end it turns out for the best; for some of the leading medical men of Montreal to-day owe their present success to the fact that they had so few patients for the first few years that they had plenty of time to study up each case when they got one, and what they learned then they never forgot. Moreover, could we all jump into a lucrative practice at the close of our college career, the poor would have no one to attend them; and yet they are the ones who most require attention, for their poverty is often the cause of their disease. The older practitioners have not the time to attend them, and they must therefore depend upon you during the first years of your practice. To attend the poor should be considered by you as a privilege you can thus bestow thousands of dollars worth of your time when you have no money to give in charity; and besides that you will thus be enabled to make friends of those who, poor as they may be, will be better friends to you, professionally, than the rich.

You have just come from the College and Hospital where your powers of observation and other intellectual machinery have received a high polish, and what you have most to dread is intellectual rust. I therefore commend you to work; not so hard as you have been doing, but still work hard. When you cannot get much remuneration work for a little—work for nothing—work for the work's sake. I would recommend you strongly to pursue some original investigations in the vast field of scientific research—especially that part of Botany for instance which comprises the study of the least and lowest forms of life. To follow out the details of Pasteur's great discovery, and make a grand reality of what we are still compelled to call the Germ *Theory*. Reason out the existence of, search for, *find* the germs of pennmonia, puerperal, typhoid and every other fever which now we can but suspect,—*that* would be a result for which no honor could be a reward too great, for which, to purchase, a thousand lives would be too cheap a price. Where Pasteur the country lad has done so much, why should not you do, or at least attempt, some more. Many things which we now see as through a glass darkly, we shall then see face to face.

The profession you have em braced is a hard one, but you are not called upon in conscience to needlessly sacrifice your health. Indeed every year you live your experience makes your life more valuable to the public welfare. It there-

fore becomes your duty to take an early opportunity of informing your patients it is very much in the interest of all concerned, and especially of the one who pays the bill, to send for you in the day time, instead of waiting until two o'clock next morning, as so many people do. The public seem to think sometimes that their family doctor is composed of two separate beings: one the human, who works hard all day, busy and anxious; the other superhuman, a species of night ghoul, who sleeps all day and revels in being called out at night.

It will not only be your duty to take care of your own health in this and many other ways, but you are in a great measure constituted the guardians of the public health. Indeed your services in *preventing* diseases are of far greater value than in curing them after they have been contracted. Indeed I venture to say that for every life that medical science and skill has saved by cure they have saved a hundred by prevention. Do not be disappointed when you discover that for these important services you will receive no remuneration and hardly any thanks. Do not be discouraged even to find that the very people whom you are generously trying to benefit, by showing them how to avoid sickness and to do without your medical attendance, will sometimes consider you an officious busybody. Persevere in doing your duty, in spite of any rebuff, for *you* have the knowledge which they have not.

You are starting out in life, and in a few years we shall expect to hear some encouraging word of your whereabouts and welfare, for, though an ocean should roll between us, your lives will ever be of the greatest interest to us; we shall ever be proud of your success, but also ready to cheer you and sympathize with you in misfortune. Where you will start has probably been thoroughly thought over in your own minds; but I may offer you a few suggestions. If you start in the country you will necessarily be general practitioners, the backbone of the profession who have won in ages past the proud position of family friend and adviser,—nay, more, of father confessor. In that position you will acquire a large experience of men and things, and this, added to your liberal education, will make you one of the leading men of your district, whose opinion will be sought upon every conceivable subject, from the merits of the protective tariff and the demands of the Canada Pacific to the coming of cholera and the war in the Soudan; and if in the course of time the electors of your district offer you a seat in Parliament, accept it as a duty, and do your duty there as honestly and fearlessly as in the humbler, but not less noble, sphere of a country doctor's life. But if you mean to settle in some large city, such as this, I would advise you to go to Europe for a year or two first, to work up some special subject, unless you are willing always to work among the poor. For here, alas! the rich no longer enjoy the luxury their forefathers once possessed and cherished, the family doctor; and the army of specialists now occupy his place. The mother who used to unburthen to him her aching heart, heavy with family cares, and the dear children who used to run to greet his smiling face, now welcome him no more. I was told the other day of a family where five specialists were all in attendance at once, and when the family doctor who had attended the parents ever since they two were made one, and who had brought them and the children through a hundred and one diseases, asked in a voice trembling with emotion, What is to become of me? the head of the house replied, "Oh we shall keep you on to tell us which specialist to call in next, as it sometimes puzzles me." Gentlemen, specialism has done much for science, more for the profession, most for the specialists. But it is just a question whether it is not being overdone. There is just the danger that the eye may be focused so intently on one object that it can see nothing else around, as illustrated in the following incident, which was related to me some time ago. A lady called upon a doctor, not knowing that he had a specialty, and requested him to see her little girl, who was ill with some kind of fever. He frankly told her that he didn't know anything about fevers, "but," said he, "give her this powder and she is sure to have fits; and, if she does, send for me, that's my specialty." It would probably be as well for the profession and better for the public, if every doctor were a good all-round man who could call in consultation in difficult cases a brother practitioner who had devoted some extra study to that particular disease. Gentlemen, I can no longer put off, what I fain would never say, the last sad words of parting. On behalf of the Faculty whom I represent, and on my own behalf, I wish you Godspeed and all success in the noble work that lies before you. May you make this earth at least a little better for your having lived upon it. May your lives be such that you may be loved while you are here and missed when you are gone. Gentlemen, farewell.

Correspondence.

MONTREAL, March 31, 1885.

To the Editors of the MEDICAL RECORD.

Being a subscriber to and a reader of your Journal I have noticed in this month's issue of it, at page 141, the following paragraph, viz : " I wonder what a Christian M. D.—(or, for the matter of that, a Homœopathic or Hygienic M. D.) would do if called to attend a case of cholera morbus." The most of physicians, to whatever sect they belong, have some knowledge of Hygiene, but, as I am as ignorant of the method of cure of the Christian scientist alluded to as the *Wanderer* seems to be of the Homœopathic method, it will more become the duty of the Christian scientist to enlighten this *Wanderer* on this later point, in the treatment of cholera morbus.

I will venture, however, to give Wanderer some hints as to what should be done in a case of cholera morbus, homœopathically, as perhaps I may claim some little right to do, as I have tested pretty fully now both the Allopathic and Homœopathic methods of cholera treatment, and have found the latter much more efficient in relieving and curing cholera as well as other diseases.

In reply to Wanderer, then, I would say the first thing to be done in the Homœopathic treatment of cholera is to prepare himself by studying the scientific method of prescribing homœopathically. By doing so, Wanderer would learn, I think, not to pay so much attention to the mere diagnostic naming of the disease to be treated as he would do to the totality of the individual symptoms of the patients who presented themselves to him. He would thus find that these physiological indications of each case would lead him to their sources, and enable him to select the appropriate remedy for that case more successfully than he would when merely treating according to the nomenclature of the case. When the symptoms produced by the administration of large doses of medicinal matter upon a healthy person produce symptoms similar to those symptoms of a dynamic disease, we may be assured that the sources of both are the same, whether functional or organic. The principle of Homœopathy, then, is to elect a curative dose of the medicine, which, when given in pathogenetic doses to a healthy person, will produce symptoms similar to those produced by the disease to be treated. By the study of this principle, Wanderer would know what to do, not only with cholera morbus but with individual cases of all other curable diseases. Has Wanderer never heard of the Report which was made to the British House of Commons regarding the treatment of Asiatic cholera by Dr. McLouchlan, the Allopathic physician, and Medical Inspector of the General Board of Health.

The Report of Dr. McLouchlan stated that under Homœopathic treatment the deaths in Asiatic cholera were 16.4 per 100, under Allopathic treatment the deaths in Asiatic cholera were 59.2 per 100. Which treatment would Wanderer select for himself after that, if he had the misfortune to be afflicted with cholera, or which treatment would be selected by any rational man, if these statistics were proven to be true, and they have been so proven? Dr. McLouchlan avowed that he would rather be treated homœopathically after noticing the results of both kinds of treatment. If Wanderer has a disposition to study Homœopathy after this there is abundance of literature on the subject. For an Allopath to begin with there is Horner's Reasons, Hahnemahnn's Organon, Hughes' Therapeutics and Pharmacodynamics, Ranes' Special Pathology and Therapeutics, and a very recent and correct little work by L. Talzer, M.D., of Calcutta, who has had much experience of the treatment of cholera in India. These books, or any others, may be obtained through our townsman Mr. Grafton, bookseller, St. James St.

I have seen in the last number of the *Canadian Practitioner* the publication of a lecture on arsenic by our fellow-citizen, Professor James Stewart. It is very able and searching from the Professor's standpoint, and does him much credit, but there is a good deal of it illustrative of the Homœopathic cure. Now Messrs. Editors, I would just say here, why should we not be all searchers after scientific truth for its own sake? Why should we not throw aside for ever sectional antipathies? Truth, it is said, will prevail at last. Let there be liberality and freedom in expressing our individual views, so that each man while he lives may help along the right spirit of the Profession.

Yours truly,

JOHN WANLESS, M.D.

Progress of Science.

PNEUMONIA—AN INFECTIOUS DISEASE.

We extract from the *Medical Record's* report of the proceedings of the third German Congress for Internal Medicine, held at Berlin, April 21-23, 1884, the following paper, by Professor Jürgensen, of Tubingen, on *True Pneumonia: Its Etiology, Pathology, Clnicial Course* and *Therapy.* *

The author gave a history of the growth of our knowledge of croupous pneumonia, and showed how opinions as to its nature had changed, until now the belief exists that pneumonia is a general infectious disease, the lung inflammation being only symptomatic. Experimental pathology had recently given indirect confirmation of this view.

The speaker then took up the alleged exciting causes of the disease, and showed that the facts regarding these did not conflict with the infection theory. Cold has been alleged to be a cause. At one time it was even said: "Frigus unica pneumoniæ causa." Different authorities reported cold to be a cause in between two per cent. and twenty per cent. of the cases. Jürgensen had in ten years' observation found cold as a cause apparently in ten per cent., really in only 4.1 per cent. It might easily be thought that exposure will produced a catarrh rendering easy the access of the infectious organisms of pneumonia.

It is a prevalent error, says Jurgensen, that pneumonia attacks by preference the strong and full-blooded. Among a population of all ages, three-fifths of the pneumonias occur in those between one and fourteen years, while twice as many occur after forty-five as between twenty and forty-four. Dittel found that the disease occurred in those previously weakened, in eighteen per cent. Flint, of Danemark, in twenty-one per cent.; the author, in 29.3 per cent. Immermann, of Basel, recently confirmed this view.

The disease has some relation to the meteorological conditions, being increased when there is increased humidity of the soil (Keller), and when the atmospheric precipitates are above the mean. These facts might be explained by the theory of an organic poison.

Pneumonia is *a disease of dwelling-houses*, like typhoid. Jürgensen had seen pneumonia in a dwelling in Amberg. Some time later the pneumonia cocci were found in the walls of the chamber. The disease occurred in epidemics, especially affecting single houses, or prisons, asylums, etc., etc. The possibility of direct passage of the disease from one person to another cannot be denied, but the occurence is rare. Flint, of Danemark, found some relation between earlier and later cases in two-thirds of his patients.

The question of the unity or multiplicity of the pneumonia poison would soon be settled.

Clinically, the disease presents great diversity even in the same families and sick-rooms. This the author was inclined to explain by assuming a variation in the extent of the development of the infectious poison. He believed that this poison, circulating in the blood, affected with special inflammation or disturbance other organs than the lungs. He cited thirteen cases of pneumonia with acute nephritis in which the kidneys were found to contain the special cocci. He believed that these produced special disturbance of brain membranes or stomach or other organs. Their development gave rise to the irregular curve of pneumonia.

Clinically, the disease may be separated into three great groups, first, those in which the general symptoms of infection; second, those in which heart symptoms; and third, those in which the lung symptoms are prominent.

In reference to prevention, the discovery of the coccus and the knowledge that it is a house-plant is of importance.

As to treatment, the author had tried iodine as an abortant without effect. The author gave a *Caution as to antipyretics*, considering them heart-depressants. He pleaded for prophylactic therapy, was doubtful of the ultimate value of bleeding, though it might temporarily relieve the heart. Finally, he announced the following conclusions: first, true pneumonia is an infectious disease, usually but not uniformly localized in the lungs; second, exposure to cold is a rare cause. The feeble are more susceptible to it than the strong.

Herr Frankel, of Berlin, continued the discussion, and took up the subject of the

Micrococcus of Pneumonia.—This coccus is distinguished from others by its gelatinous-like capsule which may surround two or more cocci. The capsules are not always present. The cocci are stained by a mixture of gentian-violet in water. Injected into rabbits they produce no uniform effect, in mice they cause pneumonia and pleurisy. In dogs, pneumonia is sometimes produced. The author found that variations in inoculation effects depended somewhat upon the cultures, which apparently had an effect of diminishing the virulence of virus. There was also another encapsuled coccus found in the human mouth, and which was the coccus of sputum septicæmia. The author announced the following theses:

1. The coccus of pneumonia, which may be isolated by pure cultures from the human being, is inoculable in various animals. Rabbits either prove refractory or become affected with severe general disease, with special localization of the virus in the internal organs—this depending on the mode of culture.

2. Further experiments must determine upon

* Many of our readers will be reminded by this paper, of a paper on the *Relations of Certain Filth Diseases to Cold Weather*, read before the American Public Health Association, in New Orleans, 1880, by A. N. Bell, with special reference to the zymotic origin of pneumonia. It is published in full in Reports and Papers of the A. P. H. Association, Vol. VI.; and in *The Sanitarian* Vol. IX; p. 78.—Editor.

what depends the varying virulence of the coccus.

3. The capsules of the cocci, as well as the "Nagelformige" growth of the pneumonia cultures, are not constant phenomena.

4. The capsules and the "nagelcultur" characterize other micro-organisms, and it cannot be said at present that the pneumonia cocci can be distinguished from them.

Herr Friedlander, of Berlin, said that the cocci of pneumonia were found in the blood during the disease. He had recently obtained the blood by wet-cups in six cases of croupous pneumonia, every precaution being taken to keep it pure. The blood thus obtained was cultivated for cocci. In one out of the five cases these developed and showed their characteristic actions when inoculated. Friedlander thought the capsule and the growth in "nagelform" very characteristic, but not sufficient for a positive diagnosis. The whole life-history must be taken into account. This life-history appears to differ, and this may account for the various forms of pneumonia, and only one has the coccus; or in the different forms the same coccus has a different life-history. The chief efforts must now be made to follow out the different changes in the growth of the organism.

Dr. Gerhardt, of Würzburg, accepted Jürgensen's view of the infectiousness of the disease. He accepted also completely the view of the unity of the disease, and considered it a happy explanation that the various complications of meningitis, pleuritis, etc., were due to local manifestations of the virus. As to treatment, it must be expectant and symptomatic; in the anæmic and feeble, a stimulating treatment. As anti-febrile means he thought veratrine dangerous; digitalis had not achieved as much as expected; kairin acted too irregularly. The most regularly acting substance was nitre (nitrum); in severer cases, quinne: in the worst (febrile) cases, cold baths with stimulants.

Dr. Frantzel, of Berlin, argued against Jürgensen's view that pneumonia was a house disease, citing its occurrence in military hospitals, and its frequency after open-air festivals and exposures. He thought the coccus entered the blood through the lungs. He explained the hæmadogenous jaundice of pneumonia by the theory that the cocci attack the red blood-cells.

Dr. Ruhile, of Bonn, contended that the view of the infectious nature of pneumonia was not so firmly established as its advocates assumed. It is necessary still to harmonize some of the known facts as to the etiology of pneumonia with the theory of a coccus. Besides, this coccus had not been found in all cases yet.

Professor Nothnagel said that in pneumonia, as in all infectious diseases, we look for a specific, and meanwhile treat symptomatically. In the last twenty-five years alcohol had entered largely into the therapeutics of the disease. Dr. Nothnagel thought that it was often used unnecessarily and excessively. Alcohol is not indicated in ordinary cases of pneumonia, and should not be used except when specially indicated by the failure of heart power.

Dr. Rosenstein, of Leyden, thought that "though croupous pneumonia may be an infectious disease in many cases, it is not in all." He did not believe in the unity of the disease.

Dr. Baumler, of Freiburg, said that a patient, a gardener, fell one day into the fire; next day he was brought to the hospital with croupous pneumonia. What rôle the cocci played in such a case was for the future to discover. If pneumonia is an infectious disease, it might be asked whether it is at first a local infection or a general one. With reference to the localization of the alleged virus in other organs, he recalled cases of pneumonia that started off with an acute nephritis; others with a meningitis. These diseases generally ran a parallel course with the pneumonia.

PNEUMONIA.

A Clinical Lecture Delivered at the Hospital of the University of Pennsylvania.

By William Pepper, M.D., LL.D.,
Provost and Professor of Theory and Practice of Medicine in the University of Pennsylvania.
Reported by William H. Morrison, M.D.

Gentlemen—The patient now before you is convalescing from an attack of pneumonia. I showed him to you one week ago on the fourteenth day of his attack, completely apyretic. He has not come up after this attack as quickly as we should like to have seen him. His past history has not been altogether satisfactory. In the first place, we find that he is the subject of constitutional syphilis, and, in addition, he has been exposing himself. When seized with pneumonia, he was not a good state of health, and this has undoubtedly retarded convalescence; for he has been completely free from fever for ten days, with a pulse about normal and respirations not over twenty per minute; nor have the physical conditions progressed as rapidly as we desired; while the critical fall of temperature, the failure to rise, the slow pulse, the easy respiration, the tranquil face and the return of appetite, indicate that the process is practically at an end. There are still traces of infiltration along the anterior border of the right lung, showing that the elements of the tissues do not throw off all traces of the morbid action and return to the healthy state, but that the morbid condition is lingering in the epithelial lining of the alveoli. Whether or not this is dependent upon the constitutional infection which he presents is a question which has been discussed, and which we have endeavored to meet by adding iodide of potassium to the treatment, which, for the past few days, has consisted in the administration of carbonate of ammonia. The treatment of the acute stage consisted in the use of carbonate of ammonia, a moderate

amount of quinine and stimulus in moderation.

The physical signs would be of interest, if I could demonstrate them to you. There has been, throughout the course of the case, low down on the right side, an area of unusual clearness on percussion, almost tympanitic. There was pseudo-tympany like that which is constantly found over a portion of the lung when the remainder is compressed by a pleural effusion, and which we sometimes find over the upper part of the lung when the lower part has become solid. The alteration of the tension of the vesicles, and in the pressure of the inspired air, give rise to a modification of resonance closely simulating that found over a cavity. To this modification, the name pseudo-tympany has been given to distinguish it from true tympany.

I indicated to you, in this case, the unusual distribution of the pneumonia. It began at the apex, and extended through to the back and downwards, until, perhaps, three-fourths of the right lung was involved, the lower part of the lower lobe in front remaining unaffected. It began as an apex pneumonia, the posterior part next became affected, while the anterior part of the lower lobe remained intact. By far the majority of cases of pneumonia, present affection of the lower lobe, and in the majority of cases it remains limited to the lower lobe, but in a large number of cases, the disease extends from the lower to the upper lobe, and the whole lung becomes affected.

There are peculiarities about apex pneumonia to which I shall refer. It is far more common in children than in adults, and this occasionally leads to pneumonia in children being overlooked, from the failure to study the whole lung and the restriction of our attention more particularly to those points in which we are more apt to find consolidation in the adult. Not rarely little children will have true croupous pneumonia, running through its stages, and terminating just as we see it in the adult, but limited throughout to the upper portion of one lung. Let me, in this connection, impress upon you the fact that there appear to be closer cerebral sympathies with this type of pneumonia than with the common basic pneumonia, and that partly because the nervous system of the child is extremely susceptible, and partly from the reason that I have mentioned, there is apt to be developed cerebral symptoms of a marked type, so that this is known as the cerebral form of pneumonia, and these nervous symptoms are apt to still further obscure the recognition of the inflammation of the lung, and these cases are apt to be treated as cases of tubercular meningitis, or simple meningitis, and the pulmonary condition not recognized. In children with nervous symptoms, if cough or chest pain is noticed, the chest should be examined with extreme care, front and back, from top to bottom. In these cases cerebral symptoms of the most alarming character may be present and pass away as the pneumonia diminishes.

Apex pneumonia is more common in young adults than it is either in children or mature people. It is apt to occur in those disposed to phthisis. There is trouble in securing complete resolution in such cases, which are apt to run into a sub-acute form and eventually develop into phthisis.

Again, apex pneumonia is met with under the influence of constitutional disturbances; thus, when pneumonia appears as a complication of malarial fever, I have often seen it involve the apex. In typhoid fever, I have seen the inflammation involve the apex more frequently than is the case in frank, idiopathic pneumonia.

These are the three most important peculiarities of apex pneumonia: In the first place, its occurrence in a somewhat obscure form in children being associated with marked cerebral symptoms. In the second place, its disposition to be followed by phthisis, and in the third place, its existence as complication of some general specific disease.

I cannot say that syphilitic pneumonia, by which term I mean something different from pneumonia in the syphilitic, for those who have constitutional syphilis may have a frank pneumonia in the same way as one free from that taint, while, on the other hand, there is a special form of pneumonia which may be called syphilitic pneumonia, which is a syphilitic affection of the lungs with the infiltration of the tissue of the lungs with a special plasma, rich in ephithelial cells, preventing, by its large amount and by the pressure which it exerts on the alveoli, the proper circulation of the blood, and giving rise to hepatization, which is very pale, dry and friable, being made up largely of epithelial elements. I cannot say that this syphilitic pneumonia especially involves the apex. It is as likely to affect the lower as the upper lobes.

I have already stated that there is in the present case an area over which pseudo-tympany is heard on percussion. In addition to this careful percussion will develop at about the third interspace, a cracked pot sound. This is not to be attributed to a cavity, for none of the lung tissue has broken down. It is dependent on the fact that there still remains, at a considerable depth, infiltration and partial consolidation in the neighborhood of a large bronchial tube. This condition is similar to that which is present when there is a small cavity. By placing the body against a firm support, and percussing with more emphasis than usual, we communicate a shock to the air in the cavity, and express a part of it from the bronchus, giving rise to the peculiar chinking which is known as the cracked pot sound. The same thing may be produced in certain conditions of partial consolidation in the neighborhood of a large bronchial tube, particularly if the ribs are at all flexible. The presence of this sound is one of the things that disturbs me in reference to this case, for it shows

that while the morbid process has ended there is still a deep infiltration of the lung, which is probably associated with the constitutional taint. I have no doubt that by a continuance of the treatment which I have mentioned, particularly by the use of specific remedies, we shall secure the removal of this infiltration, but it is a warning to us that, although the temperature and pulse are normal, we should be careful how we allow these patients to expose themselves, until we are satisfied that the local conditions have entirely passed away.

We have all been taught, by sad experience, to be careful during the convalescence of certain specific diseases, notably typhoid fever, but I fear that we are not nearly so careful in the management of convalescence from local affections, particularly those of the chest. It is one thing for the temperature to fall to normal, the pulse to come down, and the breathing become easy, and quite an other thing for the local lesions to be entirely removed. Under such circumstances the patient, if allowed to expose himself, is in danger of a relapse. Even if a relapse does not take place, something which is worse may develop. If a slight trace of inflammatory process be overlooked and the patient be allowed to return to his ordinary occupation, it will remain and slowly take on a chronic degenerative change. The great majority of chronic troubles result from imperfectly cured local affections. This is pre-eminently true in regard to catarrhal pneumonia. It is true to a less degree as regards croupous pneumonia, and it is also true in regard to pleurisy. The criterion by which we are to judge when it is proper for the patient to rise, take exercise and expose himself, is solely the result of physical examination, showing that all trace of local disease has passed away. We cannot be governed by the general symptoms, for these may subside in a most satisfactory manner, and yet the patient be far from being entirely cured. The care which has been insisted on in the acute stage should never be relaxed until the physical examination shows that all local change has passed away, unless, after pursuing a judicious course, and keeping up this care for a reasonable time, we find that the patient, in consequence of some constitutional defect or peculiarity, is passing into a chronic stage. Under such circumstances further confinement, instead of being a benefit, would probably injure the constitution. The patient is then to be treated as one with a serious chronic disease, and although he is allowed to go about it is under a most rigid hygienic regimen.

The consideration of the treatment of pneumonia demands more time than we can devote to it to-day. This man was treated in a way in which I think that you will treat most cases of this disease. When he was admitted, the disease had passed beyond the stage where depletion would be admissable. When the case is seen early, it is often well to use quite positive depletion, even if it is only local. In this case, there was no need for cardiac sedatives, but in many instances, when the patient is seen early, you will secure admirable results in limiting the inflammation and curtailing the inflammatory process by the use of veratrum viride or aconite. In order to assist the liquefaction of the exudation and stimulate expectoration, I know of no remedy equal to the carbonate of ammonia, especially if there is considerable vital depression. I consider quinine an almost essential element of the treatment of pneumonia, not in immense doses except when there is hyperpyrexia, but in doses of from eight to sixteen grains per day, given by the mouth if the stomach is perfectly tolerant, or by the rectum if it is not so. The diet is to be nutritious and the food given in small quantities and at short intervals. We are to be governed in the use of stimulants by the same considerations which control their use in other diseases. Many cases of pneumonia do very well without stimulants, and they should not be used as a matter of routine. We should wait for the development of symptoms, and when they are used, their effect should be carefully watched to see if they are doing what we wish before we continue them or increase the dose.

THE TREATMENT OF CHOLERA.

Dr. Alexander Harkin thus writes in the *Lancet* August 19, 1884:

The disease and its treatment naturally divide themselves into three stages: the pulmonary or diarrhœal; the stage of violent purging and, vomiting and cramps; and that of collapse.

For the diarrhœa nothing in my experience answers so well as dilute sulphuric acid, which should be administered every hour in doses of twenty to thirty drops in some agreeable menstrum, with mustard or turpentine epithems to the abdominal region and iced water when available *ad libitum*. Should the second stage supervene, it is necessary to take decisive steps, lest the third rapidly develop.

It is in the second stage that my peculiar experience becomes available. Physiologists teach that the phenomena of vomiting and purging depend altogether upon the nervous mechanism of the organs affected. According to Michael Foster, "the dilatation of the cardiac orifice is caused, in part at least, by efferent impulses descending the vagi, since, when these are cut, real vomiting with discharge of the gastritic contents is difficult through want of readiness in the dilatation. Since the vagus acts as an efferent nerve in causing the dilatation of the cardiac orifice so essential to the act of vomiting, it is difficult to eliminate the share taken by the vagus as an afferent nerve carrying up impulses from the stomach to the vomiting centre" (pages 275-6). The influence of the vagus is thus demonstrated in the act of vomiting, both as an afferent and an efferent conductor of nervous

energy. Kolman, too, quoted by Hall,* has shown that the right pneumogastric supplies the whole of the small intestines. "This is an inhibitory nerve," he says; "and Moreau and Lauder Brunton have demonstrated that the division of all the nerve going to a portion of intestine is followed by the secretion of a fluid just like rice-water stools of cholera. May not the stimulation," Hall continues," of the inhibitory vagus be followed by results much the same as if the sympathetic supplying the small intestine were paralyzed?" In accordance with these physiological views, I have latterly treated every case of English cholera in the second stage by remedies applied to the pneumogastric nerve in the cervical region, with the satisfactory result of putting an end at once to the profuse vomting and purging so characteristic of this stage. Arguing from its controlling effect in extreme cases of English cholera and cholera infantum, which our best authors say differ only in degree from the Asiatic type, I have every confidence that it will prove equally useful should the latter epidemic gain a footing in this country. There is another important indication, which will be subserved by counter-irritation over the vagus—viz.: the restoration of the cardio-inhibitory function of that nerve; thus the violent contraction of the heart will be controlled, the expansive power of its cavities restored, and the congestion of the pulmonary and arterial system put an end to. The application I have always used is the epispastic solution of the Pharmacopœia, applied freely with a brush behind the ear and on the neck as far as the angle of the lower jaw. No matter how violent the vomiting or purging I have never failed in stopping both by this application; a stimulating effect is produced at once and with it all gastric disturbances cease.

For the stage of collapse, which according to Claude Bernard, is due to great irritation and hypertrophy of the sympathetic nervous system, Dr. Hall, who has seen a large amount of cholera in India,† proposed to the Royal Medical and Chirurgical Society of London, on October 13, 1874, a plan of treatment which received the approval of the Society, as well as of Sir Joseph Fayer, who was present. He recommends the subcutaneous injection of a solution of chloral hydrate, 10 grains in 100 parts of water, in four or five different places according to the size of the syringe. If reaction does not commence in an hour, he injects again. The sedative soothes the contracted nerves and relaxes the contracted vessels; the blood is once more uniformly distributed, and consequently the pulse reappears at the wrist, the cramps and abdominal pains subside, sleep is induced, the respiration becomes regular, the discharges lessens, the face fills out, the voice becomes stronger, and the natural secretions are restored. Mr. Higginson, in his report to the Deputy Commissioner at Keri, Oude, states that he has treated nineteen cases of cholera according to Dr. Hall's method, of whom seventeen recovered, being about 89 per cent. of cures. For purpose of illustration I append a statement of two cases out of many which I have treated during last autumn.

Case 1. *English Cholera.*—Constable C——— sent for me on September 18, 1883, at 8.30 a. m. I found him in the act of vomiting, with small quick pulse, violent cramps, forcible palpitation of the heart, great debility, faintness, and coldness of the extremities. He was purged at frequent intervals and the dejections were of the rice-water character. He informed me that when on duty in the police-cells at 4 a. m. that day, he was attacked with profuse vomiting, followed in an hour by violent purging, with cramps, an attack occurring about every fifteen minutes. I did not order any medicine, but painted him at once in the hollow behind the ears down to the angle of the jaw with an epispastic solution, assuring him that he would not have any return of his symptoms. I visited him again at 10-30 a. m., and found him quite convalescent, not having any sickness or suffering, as I predicted.

Case 2. *Cholera Infantum.*—.On September 24, 1883, I was summoned to see a child living in Upton street, Belfast, aged twenty months, at 11-30 p. m. I found it lying on its face across its mother's knee, with its arms and legs lying listlessly at either side; it was purging and vomiting at the same time. The child was almost pulseless, and was cold and feeble. The mother informed me that it had sickened at 6 p. m., and that it had vomited at least every quarter of an hour till the time of my arrival. She had attributed its illness to a mess of soup which it had taken the previous day. She had administered milk with lime water, without any benefit. I did not recommend any medicine, but having had the child placed on its back, I painted it with the blistering fluid behind both ears, informing the mother that from that moment both vomiting and purging would cease. Soon after the application of the remedy the child began to improve, the heat returned to the extremities, and at the end of half an hour it was fast asleep, when I left for the night. Calling at 10 a. m. the next day, I saw the child in its mother's arms, looking quite lively and well. As I foretold, both vomiting and purging had instantaneously ceased.

There is no need of multiplying examples; these two are the representatives of a great number, irrespective of cases of bilious vomiting and gastritis from alcoholism, similarly and successfully treated.

In the cases related I applied the remedy behind both ears; in several others I found the single application behind the right ear sufficient for the purpose; and this appears to me preferable to the double blister, as, from its powerful inhibitory effect upon the heart as well as upon the abdominal viscera, the modified application is perhaps the safer. In these cases of severe suffering any one can understand the satisfaction that is felt

* British Medical Journal, vol. ii, 1884, p, 600.

† Ibid, vol ii, 1874, p 254.

when he is justified in saying, " Permit me to apply this external remedy, and all your troubles will at once depart."

FLATULENCE.

Mr. T. Lauder Brunton, in the Lettsomian Lectures on disorder of digestion, delivered before the Medical Society of London(*Medical Press and Circular*), speaking of flatulence, says:

Flatulence is due to the presence of gas in the stomach and intestines, which sometimes rolls about producing borborygmi, or escapes upward and downward, producing eructations or crepitations. If the pyloric orifice be closed, the gas from the intestine will not escape into the stomach, nor gas from the stomach into the intestine; but if the pylorus be open, gas may pass freely from the stomach into the intestine, and *vice versa*. An analysis of gas from the stomach shows that it consists to a great extent of nitrogen and carbonic acid, in much the same proportion as the nitrogen and oxygen of air. It is therefore probable that most of the gas in the stomach consists simply of air which has been swallowed, but from which the oxygen has been absorbed into the blood, and has been replaced by a corresponding quantity of carbonic acid. We are very apt to forget that, although the mucous membranes in man are much specialized, so as to perform a particular function most efficiently, yet their power is not entirely limited to the one function. The diffusion of oxygen and carbonic acid just mentioned, through the walls of the stomach shows us that the gastric mucous membrane has, though to a very slight extent, a respiratory action; and it is possible that other gases may be absorbed, though to a slight extent, by the gastro-intestinal mucous membrane. Indeed, I need not say it is probable, because we know for a fact that sulphuretted hydrogen may be absorbed in this manner. Some authors consider that the gastro-intestinal mucous membrane may secrete gas in large quantities. However this may be—and I think that it does not occur very frequently—it is probable that an interference with the absorption of gases may be a not unfrequent cause of flatulence.

In patients who suffer from malaria, attacks of indigestion are sometimes preceded for two or three days by a tendency to flatulence without any other symptom. This may simply be due to disturbance of the stomach and intestines alone; but still I am inclined to think that in these cases the disorder begins in the liver, and not in the stomach; the portal circulation becoming obstructed first, and the gastric mucous membrane becoming congested secondarily. After violent exertion, such as quickly running up stairs, or trying to catch a train, one may observe that, at the same time that the heart is palpitating and the breathing becoming short and difficult, there is a great tendency to flatulence. A similar condition is also found in patients with cardiac disease, and my friend Dr. Mitchell Bruce has called my attention to the frequency with which such patients complain of " heart wind."

Another source of flatulence is the gas given off from the food in abnormal process of decomposition. The secretion of gastric juice in the stomach is deficient; the food will not be rapidly digested; the secretion, instead of being acid, is nearly neutral, or perhaps even alkaline, and fermentation may occur with evolution of gas. It is evident however, that considerable time is required to allow gas to be formed in any quantity in the stomach; and flatulence from this cause will not occur until some time after food has been taken. Gas, however, may pass into the stomach from the intestines and distend it, if the pylorus be open; and such distension may occur at any time, and is not necessarily dependent on the decomposition of food in the stomach

I am inclined to think, however, that the most frequent cause of flatulence in the stomach is excessive swallowing of air. There is little doubt that boluses of food may be swallowed without air; but some fluids, especially those of a tenacious character, such as pea-soup and saliva, appear to carry down a good deal. Moreover, it appears to me that when a small quantity of saliva is swallowed at one time it does not completely fill the pharyngeal cavity, and that air is actually swallowed along with it. This does not matter—probably it is even beneficial—if it be not carried on to too great an extent. But we can easily see that, if a person goes on swallowing air after a meal is over, or in the intervals between meals, flatulent distension of the stomach may readily be produced. The conditions which give rise to frequent swallowing of air, so far as my observation goes, are, (1) a continued flow of saliva into the mouth; (2) a sense of irritation or tickling at the back of the throat;(3) a feeling of acidity in the stomach, and (4) a feeling of weight or oppression at the epigastrium or across the chest.

IODOFORM IN THE TREATMENT OF GOITRE.

My object in these brief remarks is not to give the different modes of treatment for the various forms of bronchocele, but to detail a line of treatment in which I have met with remarkable success in the last four or five years.

The most common variety of bronchocele met with is a simple hypertrophy of the thyroid gland, either one or both lobes; and it is in these cases, whether they be acute or chronic that this treatment is especially applicable.

Case 1. A married lady, aged sixty, applied to me for the relief of a " swelling," of four years, duration, on the right side of her neck. Examination showed it to be a bronchocele involving the right wing of the thyroid gland.

Case 2 was a young lady, sixteen years old, who

had a goitre of two years' duration, involving the right wing and isthmus.

Case 3. Mrs. B., aged thirty-five, consulted me in the summer of 1882, giving the following history: About three years previous she had noticed a slight enlargement on the left side of her neck, which grew in about six months to the size of an ordinary walnut, and occasioned no serious inconvenience. It remained this size for about two years, when it began to slowly increase, and three months before I saw her began to grow very rapidly, so that by the time she came to me it extended from the median line of the neck to a point beyond the outer border of the sternocleidomastoid muscle, and projected at least two inches, occasioning so much dyspnœa as to prevent her lying down—very tender to the touch and producing considerable dysphagia. She had been advised to have an operation for its removal.

Case 4. A young lady school teacher. In this case the goitre was of recent date, having existed only about six monhs, and involved only the isthmus.

Case 5. A married lady, the mother of a large family. This goitre involved both wings of the isthmus, and was of six years' duration, during which time it had grown slowly but steadily, at times becoming exceedinglypainful; and during the last year her sleep had to be taken while sitting in an easy chair. There was considerable dysphagia.

Treatment: These cases were treated uniformly, except as regards the first. In that case the local treatment only was used; for, notwithstanding her age and manner of living, her general health was very good. This is not usually the case, for goitre is generally found in anemic subjects, especially if it be of long standing. The local application consists in applying twice a day with a camel-hair brush, over the whole extent of the swelling, a ten-per-cent solution of iodoform in collodion. In a few days after the coating begins to detach itself, the skin becomes very tender, when the application will have to be discontinued for a time. After this there is usually no more tenderness. In case 1 the treatment effected a permanent cure in two months. In the other cases I gave internally, three times a day, in addition to the local treatment mentioned, a pill containing three grains of iodoform and one grain of iron by hydrogen. This frequently, if continued for several weeks, produces slight nausea, which necessitates the discontinuance of the medicine for a day or two at a time.

The improvement as a rule, evidenced by a diminution in the size of the goitre, commences in about three weeks, and after that is steady. In case 2, the patient being very anemic, treatment was not discontinued for four months.

In case 3 the improvement was very marked. The tenderness was entirely gone by the end of the first week, and the swelling considerably diminished by the end of the third. At the end of the third month the goitre had entirely disappeared, and the treatment was discontinued.

In case 4 the goitre being very small and recent, the improvement was very rapid, the patient being discharged as entirely well at the end of the sixth week.

Case 5 was under treatment for a longer time than any of the preceding ones, being under constant medical supervision for six months; but at the end of that time was entirely free from any appearance of goitre.

These are typical cases of those we most frequently meet with, occurring both in young adult life and in old age. In none of them has there been the slightest return either of the goitre or of tenderness of the parts. The treatment, while very simple, is very effectual, and promises a very sure means of relief from an affection which seems to be rather on the increase, and certainly deserves a thorough trial in each case before resort is had to any operative procedure—*Dr. C. E. Beem, in N. W. Lancet.*

LEVIS' METALLIC SPLINTS, FOR FRACTURE OF LOWER END OF THE RADIUS.

We take the following description from an article by R. J. Levis, M.D., Surgeon to the Pennsylvania Hospital, and to the Jefferson College Hospital:

"In the usual and very charateristic fracture of the carpal end of the radius the primary line of the fracture is, with little tendency to deviation, *transverse* in direction. Associated lines of fracture are generally those of comminution of the lower fragment and are caused by the upper fragment being driven vertically into it and splitting it, usually in directions towards its articular surface. The displacement of the lower fragment is towards the dorsal aspect of the forearm its articular surface is inclined in the same direction abnormally presenting backwards and upwards.

"The mechanism of the fracture is its production by falls upon the palm of the hand, which, with the carpus, undergoes extreme extension, and the fracture is caused by an *act of leverage or transverse strain.* This direction of force has also been called *cross breaking strain.* In this fracture actual displacement of the lower fragment may not exist at all, or it may be to the extent of complete separation from contact of the broken surfaces, varying with the amount of force applied and with the retaining influence of the surrounding dense structures.

"The first essential of the treatment of fracture of the lower end of the radius is *the complete reduction of the displacement.* The action of replacement must be directed to the lower fragment itself. The reduction of the fracture can usually be thoroughly effected, under anæsthesia, by *strong extension applied to the hand, associated with*

forced flexion of the wrist, and with pressure applied directly on the dorsal surface of the lower fragment. Unless vertical splitting or comminution of the lower fragments exists, the maintaining of partial flexion of the wrist, with pressure of a pad on the dorsal surface of the fragment, will prevent return of deformity.

"With the object of retaining the apposition of the fractured surfaces by overcoming displacing forces, I have practiced for many years on the principles involved in the splint here illustrated

the application of which will not require much description.

"In the treament of fracture of the lower end of the radius it is essential that proper allowance be made for the curvature of the anterior or palmar surface of this part of the bone. This is insured in the splint which I have revised, which follows correctly the radial curvature; and the fixing of the thenar and hypothenar eminences of the hand in their moulded beds maintains the splint immovably in its correct position with reference to the radial curve. To neglect of complete primary reduction of the displacement of the lower fragment, and to inefficient restoration and retention of the normal radial curve, are due the frequent unfortunate sequences of this fracture.

"The splint is made of copper, so as to be readily conformable by bending to suit the peculiarities of size and form of forearms. The slight roughness left on back of splint from perforations is for the purpose of keeping the bandage from slipping. It is nickel-plated to prevent oxidation.

"The splint will usually fit the forearm so accurately that but little padding will be required, and a piece of woven lint, or of cotton or woolen flannel is all that is necessary for its lining. No dorsal splint is needed, but, as before referred to, a small pad will in most cases be required over the dorsal surface of the lower fragment. For retention of the splint an ordinary bandage, two inches and a half to three inches wide, is all that is necessary.

"This splint has the merits of being applicable to all cases of fracture of the lower end of the radius, and also to many other injuries involving the forearm and wrist, and, as now supplied, is very inexpensive," the price being only one dollar for each piece. The splints are made in two sizes—for adults and children—and also to fit the right or left arm. As made by Mr. J. Ellwood Lee, of Conshohocken, Pa., (whose electrotypes we have borrowed for the above illustrations) the splints are flexible perforated and nickel-plated, and are very light and indestructible.

HEADACHE, SPINAL IRRITATION AND SYMPATHETIC NERVOUS AFFECTIONS DUE TO EYE STRAIN.

A Lecture by Edwin W. Hill, M.D., Cleveland, Ohio.

GENTLEMEN: I wish to draw your attention to one of the most important questions that comes before you in your daily rounds of practice, namely, the connection between the eyes and the nervous system.

At the first glance it seems absurd to think that the eyes have anything to do with the nerves, yet the more you think upon the subject the more important it becomes. The class of nervous diseases to which I wish to draw your attention are denominated functional; I like to call them sympathetic; they include headache, neuralgia, insomnia, epilepsy, spinal irritation, St. Vitus dance, nausea, vertigo, and general failure of health, both mental and physical.

They are called functional because the irritation is of a transitory nature and due to a disturbance of the circulation of the blood in the affected parts. Physiologists tell us that the circulation of the blood is controlled by the sympathetic nervous system. Please note these facts, for they are important:

1st. Headaches, epilepsy, insomnia, etc., are functional troubles, due to disturbances of the circulation.

2d. The circulation is controlled by the sympathetic nervous system.

3d. The eye in all its movements is controlled by the sympathetic, as, when the sympathetic is divided in the middle of the neck, the effect is almost instantaneous upon the eye, the pupil dilates, etc.*

Knowing the effect of division of the nerves in the neck upon the eye, is it not reasonable to say that irritation in the eye will affect the sympathetic in the neck. We know from the successful treatment of some hundreds of cases that it is a clinical fact. The chief causes of eye strain are astigmatism, hyperopia (far sight) and defective co-ordin-

* See Dalton's Physiology, pages 532-536.

ation, where there is a difference in the visual power of the eyes as well as errors of accommodation. If you wish to realize the strain of accommodation and co-ordination, hold this within three or four inches of your nose and read for five minutes when you will fully realize the nerve strain by the pain and perhaps nausea so induced. The pain will not be in the eye itself ordinarily. A remarkable fact, as given by writers upon eye strain, ( ) is, in the words of Dr. Mitchell, that while there may be no pain or sense of fatigue in the eye the strain is interpreted solely by the occipital or frontal headache. Some of the worst cases that I have treated and achieved the desired result, relief from pain and suffering, have been cases in which there was not the least sense of pain or fatigue in the eye.

The successful treatment of this class of nervous affections with the prism and cylindrical glasses requires a great deal of special study and clinical experience. It is equally true that the general practitioner is able to make a diagnosis of eye strain after his attention has been brought to the subject. (I shall be glad to send tests for astigmatism and defective vision to any one, free). It is unfortunate that the books published upon the eye contain so little upon this very important topic. Under the head of muscular asthenopia is about all that is said. Perhaps in no better way can I assist the practitioner than by giving a somewhat minute detailed history of cases treated by myself:

Case 1.—H. S. C., æt. 14, is brought to me by his mother, who says that her boy, although naturally bright, does not get on well in his studies. After he has been in school part of a term he gets fretful, peevish and unnaturally irritable; his appetite becomes poor; and he does not sleep like a child, he is uneasy and tosses about in bed. After a little he complains that he is sick, his head aches and he feels bad. I examined the boy's eyes and found astigmatism, which I corrected with suitable cylindrical glasses which he wears at school. The mother has since told me that he was a changed boy in all respects—"he eats, sleeps and plays like a boy."

Case 2.—Miss H. V., a self-educated and accomplished young lady, æt. 18, consulted me, complaining that she could not tell what was going to become of her. She was teaching school and the term was not quite half ended. She arose in the morning, after a night of very little sleep, and that little not of a quiet refreshing nature, but a troubled and dreamy sleep, with extreme fatigue and, as she expressed it, a feeling of dread that another day was upon her; before noon the pain in the neck and head would be severe, taking away her appetite for dinner, and what she did eat was forced. When night came the pain all along the spine would be so severe that she could scarcely bear the pressure of her clothing, and she was completely exhausted. Upon examination I found that her eyes were not alike in visual power and astigmatism in both, although of different degrees. With the proper glasses and wearing of them the pain disappeared and sleep returned.

Case 3. Mr. L. A., æt. 48, a successful manufacturer, consulted me, and this is his history: "My brother and I commenced business years ago; I was to attend to the books and the finances; after making up the books for the month and making out the pay-roll I always had an attack of bilious sick headache, which nothing but a full night's sleep would cure, and that did not come the first night. Nothing that I could take did any good. I have tried everything.

Upon examination I found right eye normal; left eye, astigmatism 1-60. I gave him glasses. His bilious sick headache came from the continual eye strain, in making up his books, as was proven by his not having them when the strain was removed.

I will close, using the words of Dr. Jones of the Queen's University, Cork, Ireland. "How many an unfortunate might escape a world of drugging if the practitioner could recognize the effects of astigmatism in the headache, the dizziness, the inability to work, symptoms so often referred to the stomach, all corrected by suitable glasses."—*Cincinnati Lancet.*

1. Donders on the Eye, page 260.
S. Weir Mitchell, American Med. Journal, 1874.

SICK HEADACHE.

By Francis F. Brown, M.D., Boston, Mass.

From the Boston Med. and Surg. Jour., Oct. 25, 1884 :—Sick headache, migraine, is a neuralgia. This is not the popular impression. Sufferers from it attribute it to "biliousness." This is not only the popular belief, but it was the doctrine of the systematic works until not many years since.

That this disorder is a neurosis is evident from the behavior of the attack, its change in subseqent years into ordinary neuralgia, its local effects in some cases, and its hereditary character and connection, with other neuroses.

First. I think no one can watch closely an attack of sick headache, especially if in his own person, without seeing evidence of its neuralgic character.

To begin with, there may be up to the time of the onset not the slightest symptom of gastric or hepatic derangement. Persons subject to sick headache have usually premonitory symptoms which tell them an attack is impending, and are usually the same in the same person. Some of them are sudden noises in the head, flashes of light or globes of fire before the eyes when they are closed, black spots, an appearance like a gauze veil quivering, ability to see only half an object, sleepiness, etc. Whatever they are the patient knows very well what they mean. In a large majority of cases the whole course of the attack is passed through between sunrise and sunset or a little later. Some, however, and these are usually the hereditary and severer cases, suffer for two or

three days of extreme wretchedness before the storm blows over.

It is evident that this is something very different from the headache which is consequent upon gastric and hepatic derangement only.

Second. The neurotic character of sick headache is shown by its gradual change with the increasing age of the patient into ordinary neuralgia, preferably of the ophthalmic branch of the fifth nerve.

Third. Another fact, as given by Anstie, showing its neuralgic character, is the results which sometimes follow on the track of the fifth nerve, which is the nerve most affected, and the seat of greatest pain, namely iritis, ulceration of the cornea, blanching of the hair or eyebrow, local anæsthesia and periostitis of the frontal bone.

The four latter of these occurred in Dr. Anstie's own person: the local anæsthesia remained permanent.

Fourth. Another point showing its character is the family relations of the disease. That it is often hereditary, we all have had opportunities of observing; and the most intractable cases are among those who have had neurotic ancestors.

Sick headache is more frequent in women than in men, in those who are the subject of other neuralgias than the opposite, and in general is a disease of debility. To this latter statement there are apparent marked exceptions. Occasionally we find a subject of it who carries the appearance of robust health. My impression is that these cases usually belong to families who are subject to it or the allied neuroses.

The immediate occasion of an attack may be anything which tends to exhaust the system, especially overwork, which wearies the body while it taxes and worries the mind, and loss of sleep.

Any slight deviation from one's usual routine, like a shopping excursion, or late hours, loss of a meal, or eating at an unusual hour, will induce an attack in some persons. In typical migraine I think exhaustion or loss of sleep is the occasion of ten attacks to one where indigestion is the cause.

In treatment we aim, first to avert an impending attack; second, to put the system into such condition as to render it less liable to one.

First to avert an impending attack, the most efficient remedies are guarana and caffeine.

Thirty grains of the powder, or a teaspoonful of a good fluid extract of guarana, or three or four grains of caffeine, should be given every twenty minutes or half hour till three doses are taken, unless the symptoms sooner show signs of abating. This is a point I wish to emphasize strongly; it is the key to their successful use, namely to give full doses, and to give them in the very first threatenings of an attack.

Attention to some minor points may aid in averting an attack. When the patient has undergone any unusual fatigue or loss of sleep, anything which his own experience leads him to suspect will be followed by sick headache, I think, I feel quite sure, that a full dose of bromide of potassium, thirty to sixty grains at bed-time, will lessen his liability to it. This drug is useless, it seems to me, after the attack has begun. Under the same circumstances, if the patient is at all constipated, an aloetic laxative is serviceable.

So trifling a matter as slight constipation appears at times to turn the scale under these circumstances.

Of more importance than to repel a single assault is it to so fortify the system that none will be made. How to do it must be left to the judgment of the physician in view of the needs of each individual case. Every drain and tax and irregularity that the patient has learned by experience invites an attack must be looked after and stopped. Loss of sleep and irregular hours must be prevented.

I wish to add a few words about the use of cannabis indica. In this drug I believe we have a remedy of great value in migraine. My attention was particularly called to it by an article in the *New York Medical Record* of December 8, 1877, by Dr. Seguin, who says that in doses of one-third to one half grain of good extract, thrice daily, continued for months, not less than three, it diminishes in a marked degree one's liability to these attacks. My experience has been quite limited, but I have had a few patients whose improvement from its use, after the failure of tonic treatment alone, has been very marked.—*Quarterly Epitome.*

THE TREATMENT OF WHOOPING COUGH.

Although we have so many unsatisfactory recommendations for the treatment of this intractable disease, yet we deem it well to reproduce from the *Medical Press*, September 24, 1884, the treatment advocated by Dr. Robert J. Lee, who says:

It is to be feared that experiments in treatment will not lead to any satisfactory results. It is better not to indulge in any idea of discovering a specific for this disease. Any one who expresses a strong view on the value of some particular remedy, may reasonably be suspected of insufficient observation and experience. In practice the best plan is to divide your attention between the general and the local symptoms, or rather to treat them separately. By the local symptoms I mean the laryngeal spasm, and for this the treatment must be chiefly local. Among the local remedies there is none which gives more decided relief than the inhalation of carbolic acid, a combination such as is used in this hospital, of carbolic acid, oil of pine and tincture of benzoin. Alum is a popular remedy with honey, and this acts apparently locally. Bromide of potassium and tincture of belladonna iv. to v. grains of one with iv. to v. minims of the other, seem to diminish the laryngeal irritability for a time, but in severe cases no great benefit is derived from them. As regards the general treatment we have to consider the symp-

toms of fever, and wasting. Ipecacuanha, small doses of antimony, quinine, and cod liver oil are the chief agents which may be employed in the relief of these symptoms. The great value of change of air, particularly from London or inland to the sea, is well known, and in the latter stage of the malady is superior to any medicinal remedy.

"I will conclude these remarks with the routine treatment, if I may use such a term, which in the majority of the large number of cases I generally adopt. If the disease is in the early stage I prescribe from half a drachm to a drachm of the mistura potassi bromidi et belladonna of our pharmacopœia, with an equal quantity of mistura oxymelli scillæ, and order the application of turpentine liniment every night to thorax and back; and the inhalation, when possible, of the fumes of Stockholm tar, obtained by gently heating the tar or stirring it with a hot poker. This is an economical and effective plan of treating the spasm. In the later stage of the disease the bromide and belladonna mixture should be given only at bedtime, and during the day small doses of cod liver oil and iron will best repair the condition of wasting.

"As the mortality from whooping cough is much greater in infants under twelve months than in children above that age, it is well to protect the former as much as possible from any risk of infection."

SPECIFIC TREATMENT OF DIPHTHERIA AND CROUP.

Dr. George A. Seynn, of Monongahela City, Pa., read a paper at the last meeting of the American Medical Association (*Jour. Am. Med. Association*) upon this subject. He recommended bichloride of mercury as a specific for diphtheria and chloride of gold for croup.

The bichloride of mercury should be used in the first stage of diphtheria, and in large and frequently-repeated doses, and not after everything else has failed. The effect of large doses of this remedy in the early stage of the disease is to reduce the temperature, relieve pain in the head, back and limbs, unlock the secretions, lessen the soreness in the throat in time to relieve nausea and vomiting, restore appetite, and, most of all, to prevent the generation of the poison in the membrane, and to check the formation of the membrane, or to cause it, if formed, to speedily disappear. It is best given in solution, so that when excessive nausea is present, the dose may be gradually lessened and the time shortened, giving the stomach a chance to dispose of it, but at the same time keeping up full treatment.

The dose should be, for a child three years old, one-sixteenth to one-twelfth of a grain in a teaspoonful elixir of bismuth and pepsin every three hours, and for an adult one-twelfth to one-eighth of a grain every three hours. The remedy rarely disturbs the stomach, does not produce ptyalism, and seldom acts on the bowels. Under its use, commenced early, an ordinary case is convalescent in three days, and it rarely needs to be given longer than five days.

In croup the chloride of gold acts as a specific. It should be given in solution in distilled water. As it is very deliquescent and difficult to weigh, the druggist may dissolve the contents of a fifteen-grain bottle in fifteen drachms of distilled water, and to a child five years old, one to three drops of this may be given in water every one to three hours. In other words, the dose may be one-fiftieth to one-twentieth of a grain. It should not be administered in silver or other metal spoons, but dropped into a glass with a little water. Remarkable effects are reported.

CONSTANT CRYING IN AN INFANT.

Dr. Theophilus Parvin touched, in a recent clinical lecture, published in the *College and Clinical Record*, on this subject—one usually held to be scarcely worthy of the physician's notice, but nevertheless important. The child under examination was four months old, and had cried night and day since its birth.

As a dog hunts in dreams, so this poor child, if it ever dreamed in its sleep, dreamed of crying, of pain and discomfort. It was hard, impossible indeed, to keep it still during the examination made to ascertain if there was any diseased organ making complaint in crying. Having found that the child is not suffering with positive disease, the next question is as to its nourishment. The mother said she had plenty of milk, quite as much as she had with her first babe, which got on well. Nevertheless this babe did not seem as large and as plump as it ought to; and though the quantity of milk was ample, was its quality such as it ought to be? Putting a drop on his finger-nail held obliquely, and letting the milk run down the nail the doctor found it scarcely left a trace remain, dropping it in a tumbler of water, each drop, as it fell, caused the faintest cloudiness. Finally a clinical assistant, made an examination with the microscope, and found the number of milk globules was very small. Thus a solution of the problem was reached; the infant was crying from hunger, and from hunger it had been crying for weary months. That this solution was correct is proved by the result of feeding the baby. In a few days it became quite happy and improved in appearance. The artificial food given this infant was cow's milk diluted with an equal quantity of barley water, and a little loaf sugar added. The practice of diluting cow's milk with water for infant feeding is, Dr. P. believes, a grievous mistake. That sort of dilution has simply rendered the milk less nutritious, and made it necessary to give a larger quantity of food, and at more frequent intervals, in each way impairing the child's digestive power. In this case, not water, but barley water, was added

to the milk. So much depends upon having the barley water properly prepared that a word about this preparation is necessary:

Take an ounce of pearl barley, and wash it in cold water, then put it in a vessel containing half a pint of water, and let it be gently heated over the fire, so that the water just simmers a few minutes; now pour off this water, replace it by a pint and a half of water, and boil down to a pint, and you then have barley water.

BELLADONNA INJECTION FOR GONORRHŒA.

Some thirteen years ago an officer on board one of the vessels of the Indus Steam Flotilla consulted me for a bad gonorrhœa with intense pain on micturition, and intolerable chordee at night. The case was urgent, and I ordered an injection composed of seven ounces of water, an ounce of mucilage acacia, twenty grains extract of belladonna, and twenty grains of sulphate zinc, a teaspoonful to be injected immediately before and after micturating, and a similar amount the last thing at night; great care to be used in passing the injection fully down as far as the pain is most intense. An ointment of spermaceti and mercurial ointment, four drachms each, and ten grain extract belladonna ten grains powdered opium a paste to be smeared along the perineum and around the crura penis at night. Patient left next morning having had no chordee that night, and the pain of micturtion disappeared by using the injection. Within a week there was complete cure. From that time I have had numerous gonorrhœal cases of every type and stage, and I have used the injection in every instance, and without exception with unfailing success. Not long since a shop assistant presented himself with a bad gonorrhœa, high fever, inflamed testicle and chordee at night. With the application of the belladonna and opium ointment the chordee did not appear, and in four days after using the injection the running ceased, but after the first application the pain and running were much lessened. A suspensory bandage was worn, and with the daily use of the mercurial and belladonna and opium ointment the patient was quite well in three weeks. Patients have always stated that it is the injection, and not the ointment, which stopped the chordee. I have tried the anodyne treatment in various classes of people from the dissipated nymphs of the Eastern bazaars to the well-fed *roué* in the West; in the acute and in the chronic and gleety stages; in first attacks, and in those making one of a series; and in cases complicated with inflamed testicles and chordee; and I have no hesitation in saying that I have not witnessed anything to contraindicate it nor to mitigate its success.—John Roche, M. D., in *Medical Press.*

THE CANADA MEDICAL RECORD

A Monthly Journal of Medicine and Surgery.

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MONTREAL, APRIL, 1885.

CHOLERA.

A special meeting of the Medico-Chirurgical Society was held in this City some weeks ago to consider a proposed Health Bill for the Province, and to recommend suitable precautionary measures in view of the possible advent of cholera next summer. Besides a full meeting of members, there were present Dr. Larocque City Health Officer, the President and several members of the Board of Health, and Mr. Archambault who has charge of the proposed Health Bill. After a lengthy discussion a Committee was appointed to consider the Bill, and report upon it and the Cholera question.

The Committee propose to urge upon the Quebec Government the necessity of passing at once such a comprehensive Health Bill as will secure uniformity and efficiency in working, and will not only empower municipalities to undertake sanitary reform, but will *compel* them to do so. A Provincial Health Board would be a leading feature in such a scheme.

It is also proposed to direct the attention of the Dominion Government to the necessity of passing stringent quarantine regulations and arranging for their thorough and systematic enforcement. But the best quarantine system will never prove adequate or satisfactory, as long as the medical service on board passenger ships remains inefficient and irresponsible, as at present. Steamship companies appoint their own surgeons, pay them badly, change them frequently, and give them no independent authority. If a man is honest but in-

discreet enough to find fault with existing arrangements and suggest improvements— necessary but inconvenient or expensive— he is quietly dismissed and replaced by one who is less particular. A ship's surgeon should be a *Government Health Officer*, appointed and dismissed by the Board of Trade, responsible to it for the health of the passengers and the sanitary condition of his ship, and in such matters independent of the Captain and other officers. The formation of a Merchant Medical Marine Service under Government control would greatly improve the quality of the service, and give valuable aid in preventing the spread of infectious diseases. The Government has an efficient *postal* marine service, independent of the steamship companies and their officers, why not have a Government marine *medical* service? Should not the lives of our people and the prevention of epidemic disease be matters of as much solicitude to the Government as the safe transit of our letters and papers.

This whole question has been fully discussed in Great Britain,-1882, 3-4, and has been the subject of parliamentary agitation. To Dr. J. A. Irwin, now of New York, belongs the credit of first directing public attention to the evils and abuses of the present system. The medical journals kept up the agitation, and strongly advocate reform, prominent among them being the *British Medical Journal*, *Lancet*, *Medical Press*, *Medical Times* and *Gazette*. By the non-medical press, opinions equally strong were expressed, especially by the *Daily Telegraph*, *Manchester Courier*, *Irish Times*, *Freeman's Journal*, *Liverpool Mercury*, *Nautical Gazette*, *Gaillards Journal*, and the *Graphic*. The British Medical Association took up the question, and in March, 1883, its Parliamentary Bills Committee drew up a memorial, which was laid before the President of the Board of Trade by an influential deputation accompanied by Sir Lyon Playfair and twenty other members of Parliament. The movement secured the interest and active co-operation of many eminent men, such as Sir Lyon Playfair, Sir Eardley Wilmont, Herbert Gladstone, W. E. Forster, Sir Thomas Farrar, Ernest Hart, Baron Henry de Worms, Sir Saul Samuel, Sir John Lubbock, Professor Huxley, Sir Spencer Wells, Sir William McCormack, Sir Edward Reed, and the Duke of Beaufort. The Government promised to consider the question, but its attention has been so much occupied with other matters that legislation has not yet been accomplished.

In 1883 the American Medical Association at its Cleveland meeting appointed a committee to consider the regulation of emigration by Congress. A Bill was drawn up and laid before the National House of Representatives, but has been referred back to the committee for amendment. The American medical and non-medical papers advocate reform as strongly as their English contemporaries, particularly the *N. Y. Medical Record*, *Boston Medical and Surgical Journal*, *N. York Daily Tribune*, *New York Herald*. It is everywhere conceded that reform is necessary; and if quarantine regulations are to be properly carried out. the medical examination of passengers at the port of embarkation, their treatment and supervision during the voyage, and their inspection before landing *must* be made harmonious parts of a uniform system of medical service, not independent and sometimes conflicting, as at present—

We print elsewhere the memorial of the British Medical Association, and an article from the N. *Y. Evening Telegram*, giving Dr. J. A. Irwin's views upon the precautions which should be taken against cholera.

PRECAUTIONS AGAINST CHOLERA.

I have studied that disease in India its hot-bed and watched its spread through several epidemics, and I consider it by no means unlikely that it may reach New York through the summer or fall of next year, as cholera once started on its march often retains its vitality for a couple of years. The weak point of our defence lies in the now notorious inefficiency of the medical service on board passenger ships. On each side of the ocean there is an excellent health service, but the ocean passage is virtually ignored. The united medical opinion of both countries is loud in its denunciation of this evil. Last year, at the instigation of the British Medical Association, a strong deputation, including twenty members of Parliament, urged the President of the Board of Trade in England to introduce a Bill covering that point. The Cabinet Minister promised much and did nothing. The American Medical Association some time ago drafted a Bill for the same purpose, which is now before Congress, but which, notwithstanding the able engineering of General Slocum, is likely to end in nothing. Ships' surgeons are now responsible to the owners, and I could quote a large number of instances in which an attempt on the surgeon's part to do his duty to his patients or to the public

has been followed by dismissal. For obvious reasons, the owners desire to hush up cases of infection. For equally obvious reasons ship surgeons humor this desire. Therefore at present the only protection against the introduction of diseases such as smallpox and cholera, lies in a stringent quarantine. But the period of incubation for smallpox is from seven to sixteen days, while that of cholera is not accurately determined, but is set down from a few hours to fourteen days. If it be true, as Surgeon-General Hamilton lately said that "every possible advantage is taken of the boarding officer" to conceal cases of infection, the time that the voyage has taken cannot be counted as equivalent to quarantine. That must begin when the vessel arrives, and then the requirements of health and the convenience of commerce come into conflict. A sixteen days' quarantine for every vessel arriving would be impossible. As a matter of fact, quarantine is exceedingly lax, many vessels with smallpox on board being granted pratique on the passengers being vaccinated. In the case of cholera there is an additional uncertainty on account of the difficulty of distinguishing it from cholera morbus. An experienced ship's surgeon might mistake the one for the other, and give a false report, however honest he might be; and although there are some first-class men in the service, it is well known in the profession that first-class men, as a rule, will not at present take the position of ship's surgeon and be creatures of the owners. I have myself been a ship's surgeon in two of the great transatlantic lines, and I thoroughly understand the situation. What is required is that the ship's surgeon shall be completely independent of the owners, and of the owner's paid servant, the captain. He should be responsible, as far as his medical service goes, (which means the retention of his position) only to the health authorities on either side, who are perfectly willing to pull together. To say that there would be then a conflict of authority no board ship in that case is nonsense, both theoretically and practically—theoretically because the captain's supreme authority on board ship under the law is that of a magistrate whose functions need not clash with those of a surgeon on board ship, if both were properly defined, any more than do the functions of magistrate and surgeon on land. It is in his quality of representative of the owner that the Captain does the mischief, for if the surgeon displeases him by too honestly discharging his duty, the captain reports him and has him discharged, not as a magistrate but as the owner's agent. The danger of conflict of authority is practically disproved by the experience of the British Colonial Immigration Service, in which the ship's surgeon is appointed by the Board of Trade and can not be dismissed by the owners. The position is one of dignity, and there is therefore no difficuly in getting excellent men to fill it. The positions of the surgeon and the captain in that service being clearly defined by law do not clash, and, as matter of fact, disputes of any kind are as rare between them, as between the Captain of a transport and the colonel of the regiment being transported. The effect of making the embarking, the voyage, and the disembarking all parts of one medical service is to make the whole efficient. The effect of the present lax medical supervision on board ship is to create carelessness on both sides of the ocean, for nothing disheartens a man so much as to know that, however conscientiously he may perform his duty, his work may be spoiled by the negligence or dishonesty of another.—Dr. I. A. IRWIN, in N. Y. *Evening Telegram.* Dec. 22nd, 1884.

THE MEDICAL SERVICE OF ATLANTIC STEAMSHIPS.

MEMORIAL OF THE PARLIAMENTARY BILLS COMMITTEE OF THE BRITISH MEDICAL ASSOCIATION.

To the Right Honorable Joseph Chamberlain, M.P., President of the Board of Trade:

This memorial respectfully sheweth that the medical and sanitary administration of ocean steamers, especially of those engaged in the North Atlantic emigrant trade, is often seriously defective, whereby many lives are annually sacrificed. The following reasons may be assigned:

1. The medical officers are appointed without due regard to age, health, professional qualification or character.

2. They seldom retain the position for any considerable period, and there is no organisation through which the results of their collective experience may be turned to practical account.

3. The sanitary arrangements of passenger-ships are, without exception, far from what they should be; they are very often grossly defective.

4. The medical officer is denied such independent authority in sanitary matters as is essential to his efficiency as a sanitary officer.

5. His duty with reference to these matters is uncertain, and varies upon almost every vessel. His responsibility is entirely undefined, but he knows that any interference upon his part with existing customs or arrangements would be unwelcome to his employers, and would very likely bring him into unpleasant contact with more influential officials, thereby compromising his position while on board, and the tenure of his office at the conclusion of the voyage.

6. As a consequence, sanitary precautions are not unfrequently, sometimes habitually, neglected throughout the voyage.

7. The surgeon is not allowed adequate assistance for the proper care and treatment of the sick. He has no hospital steward or sick nurse, no dispenser, and no servant; and consequently miscellaneous duties devolve upon him, which he cannot possibly perform efficiently during the frequently recurring times of general sickness, and some of which are distinctly derogatory to his position as medical officer of the ship.

8. The hospitals are generally insufficient, often ill-placed, and sometimes taken from the surgeon's control, and devoted to other purposes than the accommodation of the sick.

9. The medical officer is usually allotted quarters without regard to his health, personal comfort, or the possibility of efficiently discharging his professional duties.

10. His tenure of office is uncertain, often depending on the mere caprice of other officials.

11. His salary—never more than £10 per month, and usually on a par with that of the cook, steward, and fourth or fifth engineer—affords inadequate remuneration for competent and experienced medical services. There is no provision for retirement or superannuation; and therefore, when, after years of laborious public service the ship-surgeon loses his position from ill-health or otherwise, through no fault of his own, he finds himself without provision for the future, and, with reference to other chances of employment, in every respect worse off than when first he obtained his diploma.

Under these circumstances, it is not surprising that, as stated by a leading medical journal, "comparatively few surgeons in every way suitable" can be found in the Mercantile Marine service; or that it should have been ascertained, that the mortality among passengers is "far higher than is justified by the necessities of transit."

As a remedy for this unsatisfactory state of affairs, your memorialists respectfully propose:

1. That the Board of Trade should obtain powers to take this important branch of the public service under its own immediate direction.

2. That a regularly constituted "Marine Medica Service" should be formed; the members of which would be appointed under the direct supervision of the Board and would be responsible to it for the efficient performance of their duties.

3. That the conditions of such appointment should be reasonably stringent, in view of the serious and difficult nature of the service required.

4. That the present disabilities, with reference to unsuitable accommodation, want of assistance, and inadequate remuneration, should be amended under the direction of the Board; and that the position should be made sufficiently desirable to attract and retain the services of thoroughly competent and experienced medical men.

5. That the duties, responsibilities, status and uniform of marine medical officers should be distinctly determined, and made constant upon vessels carrying passengers under the supervision of the Board of Trade.

6. That the medical officers should have separate authority in sanitary matters, not involving the safety or general discipline of the ship.

7. That he should be assured of the full protection of the Board in the discharge of his duties, and in all cases of vexatious interference, or unfounded complaint.

8. That his tenure of office should be as permanent as other public services, and not simply from voyage to voyage, as at present.

9. That the conditions of the service should include promotion and provision for superannuation or retirement through ill-health.

10. That a junior or assistant-Surgeon should be carried by every vessel having on board more than 600 persons; and that suitable arrangements should be made for his accommodation and remuneration.

11. That the medical officers should be required to frequently inspect the inhabited portions of the vessel, and to furnish at the conclusionof each voyage a suitable report upon the hygienic conditions of the voyage, and upon all matters likely to affect the health of the passengers. [Such reports, taken collectively, would be of great value in the public service.]

BISHOP'S COLLEGE FACULTY OF MEDICINE.

ANNUAL CONVOCATION.

The fourteenth annual convocation of the Medical Faculty of Bishop's College was held in the Synod Hall, Montreal, on the 1st of April. In spite of a most disagreeable day, the rain falling in torrents, a very considerable assembly was present, a large proportion being ladies. The Hon. Chancellor Heneker occupied the chair, and conferred the degrees. Dr. F. W. Campbell, the Dean of the Faculty, read the following:

REPORT OF SESSION, 1884-5.

The number of matriculated students for the Session 1884-5 is 23, of whom 2 come from the United States, 2 from Ontario, 17 from Quebec, 2 from West Indies. Eight of our students are residents of Montreal.

The following are the results of the Examinations.

Botany.—F. H. Pickel, Frederick Taylor, John P. McLaren.

Practical Chemistry.—V. J. Groulx and F. Taylor, equal; Rollo Campbell, S. A. A. Thomas, W. E. Fairfield.

Practical Anatomy.—V. J. Groulx, R. Campbell, J. Rohlehr, W. E. Fairfield, A. P. Scott.

Anatomy.—1st Class, V. J. Groulx, W. E. Fairfield, R. Campbell.

2nd Class—A. P. Scott.

Pass.—John Rohlehr.

Physiology.—1st Class—W. E. Fairfield, A. F. Longeway, R. Campbell.

2nd.—A. E. Phelan, V. J. Groulx.

Pass—A. P. Scott, S. A. A. Thomas.

Materia Medica and Therapeutics.—1st Class—V. J. Groulx, A. F. Longeway, R. Campbell.—2nd Class.—A. E. Phelan.

Chemistry.—1st Class.—W. E. Fairfield, V. J. Groulx, A. E. Phelan, R. Campbell, S. A. A. Thomas.

Pass.—J. Rohlehr.

Hygiene.—1st Class—W. E. Fairfield, R. Campbell, V. J. Groulx.

Pass.—A. P. Scott, S. A. A. Thomas; J. Rohlehr and B. J. Ambrosse, equal.

Medical Jurisprudence.—1st Class.—A. F. Longeway.

The following gentlemen have passed their primary examination, consisting of Anatomy, Physiology, Materia Medica and Therapeutics, Chemistry, Hygiene, Practical Anatomy and Practical Chemistry:—

Albert F. Longeway, Dunham, P. Q.—1st Class honours, and "*David Scholarship*" (awarded to the student who takes the highest number of marks in the primary examination.)

Vilda J. Groulx, Belle Riviere, P. Q., 1st class honours.

Rollo Campbell, Montreal, 1st class honours.

Albert P. Scott, Montreal, 2nd class honours.

The following gentlemen have passed their final examination for the degree of C.M., M.D., consisting of Practice of Medicine, Surgery, Obstetrics and Diseases of Children, Gynecology, Pathology, Medical Jurisprudence, Clinical Medicine and Clinical Surgery:—

Frank R. England, Dunham, P.Q., 1st class honours, and "Wood Gold Medal" (awarded to the student who has attended at least two six months sessions at Bishop's College, and has obtained the highest aggregate marks in primary and final examinations).

Rev. Jabez B. Saunders, Stanstead, P.Q., Chancellor's Prize, for best final examination, the Wood Gold Medalist not being allowed to compete.

Charles E. Parent, Waterloo; *Clarence R. Gillard*, M.R.C.S., L.S.A., Jamaica, W. I. The "Robert Nelson" Gold Medal for special excellence in Surgery is awarded to F. R. England. This medal founded by Dr. C. E. Nelson of New York is awarded annually to the student standing first in a special examination in Surgery, written out and practical. No one is allowed to compete unless he has attended at least two sessions at Bishop's College, and has obtained first class honours in primary and final examinations.

In order to pass in any subject, a candidate must obtain at least 50 per cent of the maximum marks; second class honours require at least 60 per cent; first class honours, at least seventy-five per cent.

PRIZE LIST.

"Wood" Gold Medal and "Robert Nelson" Gold Medal—F. R. England.

Chancellor's Prize—Rev. J. B. Saunders.

David Scholarship—A. F. Longeway.

Practical Anatomy—V. J. Groulx.

The degrees having been conferred, Dr. J. B. Saunders delivered the valedictory on the part of the graduates and Dr. A. Lapthorn Smith addressed the graduates on the part of the Faculty.

McGILL UNIVERSITY—ANNUAL CONVOCATION.

The annual convocation of the Medical Faculty of McGill University took place on Monday afternoon, March 30, in the William Molson Hall.

The total number of students enregistered in this Faculty during the past year was 234, of whom there were: from Ontario 126; Quebec, 58; New Brunswick, 20; Nova Scotia, 11; United States, 8; P. E. Island, 3; Newfoundland, 3; West Indies, 2; British Columbia, 1; Manitoba, 1; Ireland, 1.

The following gentlemen, having fulfilled all the requirements to entitle them to the degree of M.D., C.M., from the University, had it conferred on them. In addition to the Primary subjects mentioned they have passed a satisfactory examination, both written and oral, on the following subjects:—Principles and Practice of Surgery, Theory and Practice of Medicine, Obstetrics and Diseases of Women and Children, Medical Jurisprudence, Pathology and Hygiene, and also Clinical Examinations in Medicine and Surgery conducted at the bedside in the Hospital:

Arthur, R. H., Brighton, O.; Allan, J. H. B., Montreal, Q.; Baird, T. A., Chesterfield, O.; Burrows, F. N., Drayton, O.; Cassidy, Geo. O., Goldstone, O.; Daly, Walter S., Ogdensburg, U.S.; Corson, Douglass, Woodstock, O.; Darey, J. H., Montreal, Q.; Dazé, Henri, Montreal, Q.; Doherty, W. W., Kingston, N.B.; Elder, John, Huntingdon, Q.; Eberts, D. W., Chatham, O.; Finlay, F. G., Montreal, Q.; Harkin, F. McD., Vankleek Hill, O.; Hallett, E. O. Truro, N.S.; Hurdman, H. T., Aylmer, Q.; Gustin, Smith, London, O.; Hanna, A. E., Harlem, O.; Hawkins, A. C., Halifax, N.S.; Irvine, R. T., Carp, O.; Johnson, H. D., Charlottetown, P.E.I.; Klock, W. H., Aylmer, Q.; McMeekin, J. W., St. Catharines, O.; McGannon, M. C., Prescott, O.; McCormack, N., Pembroke, O.; McDonald, H. J., Alexandria, O.; McMillan, D. L., Alexandria, O.; Powell, F. H., Ottawa, O.; Palmer, G. F., Ottawa, O.; Robertson, A. M., Brockville, O.; Shibley, J. L., Yarker, O.; Wishart, D. G., Madoc, O.; Wilson, J. A K., Manotick, O.; Wood, Edwin Geo., Londesboro,' O.

Local and General.

Montreal has been honored by the selection of Dr. Osler to deliver the Gulstonian lecture this year. We can only regard him as transplanted to the congenial soil of the University of Pennyslvania. In his three lectures he refers continually to the Montreal General Hospital and to his colleagues there. Those who take the Philadelphia *Medical News* will find a verbatim report of this original description of malignant endocarditis.

To read the newspaper reports one would think that General Grant was on the road to recovery. We, who know the true state of the case, can distinguish between a *stay* in the progress of the disease and the improvement which precedes complete restoration to health. The local application of cocoaine has given him much relief, but the destruction of the tissues of the pharynx goes slowly on. The disease resembles the soft epithelioma which sometimes affects the æsophagus. There is not much induration and little pain. No doubt it is the absence of the latter symptom which has raised the hopes of the General's friends.

Fabrini of Palermo (*Centralblatt für die Medicinische Wissenchaften*) has given us something new. He proposes to substitute for the ordinary transfusion of blood the extraordinary *inhalation* of the same. This is how it is done: a mixture of twenty per cent of bullocks' defibrinated blood and eighty per cent. of a very dilute (¾ per cent) solution of sodia chloride is sprayed into the throat of the patient. Three ounces and a half of this mixture may be inhaled at one sitting; it does not produce coughing, does not raise the temperature nor bring about any perceptible alteration in the circulation or respiration, and auscultation shows that it is very soon absorbed.

Professor Fabrini has tried this method in several cases of oligæmia with the best results. The patients' condition improve, there was a decided increase in the relative number of the red corpuscles and in the quantity of hæmoglobin. Of course we shall be obliged to have more extended trials of this novel method of blood-making before we can pass judgment on it.

I suppose I might claim relationship with *Zadkiel* and Vennor, *et hoc genus omne.* I predicted nearly three months ago that an outbreak of small pox was at hand, and, lo ! it appeared shortly afterwards.

Strange that this city should be the objective point of this dreaded disease every few years.

Doubtless it illustrates that mysterious law which V morbilli, scarlatina, pertussis, etc., also governs the periodic visits of. I fear that, in spite of all the precautions which the authorities may take, the infection will, as usual, spread to all parts of the city, and that our Civic Hospital, so long closed, will again have a season of active usefulness.

I wish I could pass the subject over with this slight allusion, but, in spite of Dr. Hingston's letter to the *Gazette* (April 18) I am afraid that somebody is sadly to blame for the spread of the disease. Didn't Dr. Rodger inform the Hotel Dieu officials that the patient he was sending thither was the subject of variola, and that he had just been exposed to the disease? Was it not well understood that the General Hospital authorities had very properly refused to admit him, because every one knew that he was carrying small-pox about with him?

Again, how many medical men will be convinced by Dr. Hingston's statements that the epidemic now prevailing arose *sua spoten*, and had no necessary connection with the case "about whom the physicians in attendance were not unanimous?" Surely, we cannot be expected to believe that with a case of small-pox already in the hospital, to which probably sisters, servants, friends, attending physicians and others had access "before a sister and a servant had been detailed to wait upon him," other cases should be regarded as arising from unknown causes?

The imported and first case was not isolated at all, in the proper sense of the word, but nearly two weeks afterwards when a servant in a "distant" part (why *distant* part? does Dr. H. wish us to understand that variola cannot travel 300 yards in the fortnight?) of the Hospital took the disease then she is placed in a building outside of the Hotel Dieu, the health authorities are communicated with, and the disease finally infects the whole Hospital, which is, very properly, closed.

The *British Medical Journal* tells us how to make artificial cheese. Skim milk and oleo-margarine are made into an emulsion and the resulting cream (?) is added to more skim milk. Enriched in this way with fat the fluid can be made to yield a fair sample of cheese. An oleomargarine cheese (for which I would suggest the name cheesette) although it would have considerable nutritive value could not possibly have the flavor of the genuine article.

R. B. Hall, in the Cincinnati *Lancet and Clinic* (March 14) describes a laparotomy done by Dr. A. Martin of Berlin in his private Hospital. I speak of it because Martin is one of the few who now make any extensive use of the carbolic acid spray during abdominal sections. The account is too long to give here, but evidently Dr. Martin does not believe that if the object of the spray is to kill micro-organisms that are likely to infect the wound that that purpose may be accomplished by merely allowing a steamer to eject carbolized steam for an hour or so before and during an operation.

During the time of the operation and for half an hour before it is commenced the spray apparatus is kept going, so that the air in the room (a small one) is saturated with carbolized moisture. So thoroughly is this done that the water runs down the walls, and the clothing of operator and spectators feels and looks as if they had taken a bath. Dr. Martin and his assistant wear linen clothing during the operation, which is washed before it is again worn. The cloud of carbolized steam is so thick that one can see with difficulty, and it soon becomes so irritating as to cause coughing.

The preliminary precautions to be observed by the person who is invited to attend operations in his private hospital are as follows: 1. For 24 hours before coming to the hospital he must not go where there is infection. 2. He must wear freshly washed linen and clothing that has not been worn in the sick room or hospital. 3. In the operating room he must not touch instruments,

sponges or anything used at the operation. At the hour named the door of the room is locked, and nobody is expected to leave until the wound made has been dressed. Visitors are requested to remove their coats, vest and cravat, and are admitted to the room only when the patient is on the table and all arrangements are completed.

Dr. Martin has remarkable success, as the result of the strict carrying out of this plan ; but one feels like asking whether, if there were no antiseptic in the steam, or indeed if the spray were omitted altogether, similar favorable results might not ensue. I see that Emmet is opposed to the use of the carbolic spray in any shape (page 715 "Principles and Practice of Gynecology") and the proof is plain of its having poisoned patients.

The latest advices from German laboratories report no new bacilli this week. There has also been no re-christening of the cholera germ. It is now in order for some one to show that Koch, and all the members of both commissions (French and English) are in entire harmony!

I understand that there is considerable dissatisfaction in medico-military circles with the appointment of Dr. Roddick as assistant Director general of the surgical service in the North-West. No objection can be raised to Dr. Roddick in the score of ability or experience, but it is claimed that he was actually appointed over the heads of all the old surgeons in the militia who have served for varying terms, while but very recently connected with the "Prince of Wales Rifles" himself. Of the propriety of Dr. Bergin's appointment there can be no question. He has been lieutenant-colonel of the 59th Battalion since 1869, and is a man of energy and ability.

P. A. LAVER, M.D.

MONTREAL, April 19, 1885.

PERSONAL.

Dr. GRAVELEY, of Cornwall (C.M., M.D., Bishop's College, 1877), has been appointed 2nd Surgeon to the Ambulance Corps on duty in the North-West, under the direction of Dr. Douglas, V.C. Dr. Bell, Surgeon of the 6th Fusiliers, Montreal, is 1st Surgeon of the above Ambulance Corps. Dr. England (C.M., M.D., Bishop's College 1885), left for England on the 18th by the Allan steamship "Circassian." Dr. England intends passing some time at the London Hospital.

Dr. RODDICK, of Montreal, has been appointed principal medical officer to the forces in the North-West. Dr. Roddick was appointed Surgeon to the 1st Battalion (Prince of Wales Rifles) on the 21st March, 1885.

Dr. J. G. B. HOWARD, son of Dr. R. P. Howard, of Montreal, has returned from a lengthened sojourn in Europe, and has commenced practice in this city.

Dr. MACDONALD (C.M., M.D., Bishop's College) of Manchester, N.H., U. S., has received from the Pope a decoration. Dr. MacDonald, who belongs to Nicolet, served in the Papal Zouaves.

Dr. W. P. Shoemaker, of Elk City, Penn., U. S., whose letters on the New York Hospitals and Medical Schools have appeared in the last two numbers of the *Record*, is now in London, England. He has been given the position of Clinical Assistant to Sir Andrew Clark of the London Hospital. Some interesting communications from him will shortly appear in our columns.

Dr. Heartwell, of Dunnville, Ont., died suddenly on the 10th of February, at the early age of 36 years. Dr. W. H. Montague has returned to Dunnville, Ont.

Dr. O. S. Strange, of Kingston, Ont., has received the surgeoncy of the penitentiary, in place of Dr. Lavell, who has been appointed warden of the same institution.

Surgeon-Major Neilson of B Battery Canadian Artillery, who went to Egypt in medical charge of the Canadian Voyageurs, did not return with them. He remains in the Soudan, and we believe was with General Stewart's column in its terrible march across the desert.

Dr. J. W. Mount has again been elected a member of the Montreal City Council.

Dr. Turcotte of the 9th Bat. Quebec has been gazetted "Surgeon-Major" as a special case. His commission is August, 1870.

Dr. Giason of L'Islet is a warrior doctor. He has just gone through the military school at St. John, P. Q., as a lieut. of one of the Battalions in his neighborhood.

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Original Communications.

ANTISEPTIC MIDWIFERY.

BY GEO. E. ARMSTRONG, M.D.

Professor Physiology University of Bishop's College, &c.

(Read before the Medico-Chirurgical Society of Montreal.)

That Sir Joseph Lister has done a great deal for surgery—by enlarging the field of justifiable operations and by rendering the results of all operations more satisfactory—probably none will deny. But to what extent the details of his method of operating are essential there is still a wide difference of opinion; and even the soundness of the theory upon which his practice is based may be safely questioned. Indeed there is a suspicion among not a few that, after all, we may find in the future the lesson to be learned from the practice of Lister is that absolute cleanliness of the part operated, upon the part of the operator, and of instruments used in the operation, is *the great essential* of success, and the thanks of the profession to Joseph Lister should be none the less profound because his labors have been none the less effective if the suspicion should prove to be correct. The germ theory is the fashionable way of accounting for many of the accidents of surgery, as well as for the presence among us of many diseases. Lest we again lay ourselves open to the charge, sometimes laid against us by the lay press, of allowing ourselves to be led to one extreme by some prominent professor with an unpronounceable name, and then in a short time following some other leader as blindly to the other extreme, let us pause and examine some of the facts of familiar occurrence in every-day life, and ascertain whether or not they are in harmony with the theory advanced.

Antiseptic surgery is based on the theory that the atmosphere which we breathe and by which we are surrounded contains germs which when allowed to come in contact with wounds, are capable of lighting up unhealthy action in them, and this theory has been more and more widely applied, until now, by some, it is taught that the physiological act of child-birth should always be conducted on what are known as strictly antiseptic principles, and it is this somewhat new application of the germ theory that I purpose briefly to discuss this evening.

Do our parturient patients whom we attend in confinement in the ordinary way without the use of any antiseptic dressings or douches, and without any special previous cleansing or disinfection of their apartments, present as a rule symptoms of septic inoculation? So far as my experience goes the answer is decidedly in the negative. If I am not much mistaken, it is the exception for men who do a large midwifery practice among the middle and lower classes to have cases of septic poisoning occurring among their parturient women. We younger men are often called to attend women in their confinement whom we see for the first time when they are in labor,—women who live in unhealthy, low, badly-drained localities, and in houses not over-clean and illy-ventilated. Women whose surroundings are eminently adapted to favor the growth and spread of atmospheric germs, and yet even among these I believe it is comparatively rare to have trouble of a septic character.

Now if a man confines 100 women, and 98 of them make perfect recoveries and two of them present symptoms of septic poisoning, should he blame any one of the many surroundings common to them all as air, or should he look for some extraordinary agent, to account for the evil. The experience of ages and all medical literature teaches the latter. We constantly hear and read of septic cases due to a portion of decomposing placenta or membrane or blood-clot remaining in the uterus or vagina, or cases that can easily be traced to contagion carried by the accoucher.

Now, is it possible for the strictest antiseptic precautions to prevent the occurrence of septic infection of women during and after their confinement?

Let us suppose, for instance, that we have had apartments to be occupied by our patient newly whitewashed and papered and disinfected, and the bed and bedding and napkins and all the clothes to be used by the patient thoroughly carbolized or sublimated, is our patient then safe? I fear not, unless the accoucheur and nurse themselves see to it that they neither touch nor enter the presence of any unclean thing. If the doctor comes from examining a child with diphtheria, or a patient with erysipelas, and enters that chamber, and touches the patient or he napkins, he unavoidably communicates the poisons to the patient or to the napkins and the napkins to the patient. I think I cannot better illustrate not only the *possibility*, but the *probability* of such a sequence of events than by quoting an account of similar occurrences from the latest edition of Emmet's Principles and Practice of Gynæcology. On pages 717 and 718 of this work Emmet relates the two following cases. In the first one Dr. Emmet was about to remove a small ovarian cyst from a young girl in apparently perfect health. Dr. Emmet says: "The sponges, instruments and ligatures had been prepared with unusual care, and I never performed an operation where there seemed so little liability for any complication to occur." Just before the operation several physicians from the Polyclinic or Post-Graduate Medical School sent in cards of introduction from some of the staff, requesting that they might witness the operation, and they were admitted. Just as the Doctor was commencing the operation one of these gentlemen picked up a pair of forceps or scissors from the tray to show a friend alongside. Emmet caught his hand, requested that he would not touch the instruments, and then went on with the operation, neglecting to disinfect the hand that had touched the gentleman's coat. In less than 24 hours, the report says, the girl was doomed, and died on the sixth or seventh day. It was found at the autopsy that an abscess had formed, extending from the wound and around the pedicle, and that the girl died of septic peritonitis. Emmet adds that the man who picked up the instrument was responsible for the girl's death.

The other case is that of a woman suffering from procidentia sent to Dr. Emmet for treatment by Dr. A. Jacobs. At the operation, after Dr. Emmet had denuded a large surface, Dr. Jacobs, who was present, placed his finger upon the prolapsed surface to satisfy himself that it was unusually hard. Two days after the operation, the patient's temperature was found to be 105°. Upon removal of the sutures the whole surface which had been freshened was found covered with a diphtheritic deposit as thick as a piece of chamois leather. It was ascertained that Dr. Jacobs had examined the throat of a child suffering from diphtheria early that morning. The operator had not seen a case for years; Dr. Bache Emmet, the assistant, had not in six months. The nurses were out of the way of meeting the disease, and the patient had not been out of the house for several weeks.

Now the two points I would make here are:—

1. How remarkably easy septic matter is conveyed. From what we know of the properties of septic matter it does seem that if the air is full of them all wounds exposed to the atmosphere pressing these germs against exposed surfaces, with a pressure of 15 lbs to the square inch, should become infected; yet we know from experience that this is not the case, and the fact that this is not the case is good evidence that the atmosphere ordinarily does not contain them. That wounds heal kindly and by first intention, and that women are confined every day without any septic trouble supervening, and without the so-called antiseptic precautions being taken, certainly proves this much—that the so-called antiseptic precautions are not essential to perfect healing of the parts after an operation or to perfect recoveries after confinement.

And, 2, that, in spite of all possible antiseptic precautions, one touch from a known and well-de-

fined source of contagion, renders all our antiseptic preparations useless.

May not the question be fairly asked: if all the known and well-defined sources of contagion are strictly guarded against would we need all this paraphernalia to protect our patients against an imaginary foe?

When going through a hospital and seeing wounds filled with pus that have been made under the spray and dressed according to Lister's method, it is really amusing to listen to the many explanations given to account for the presence of the pus and the unhealthy action. Some little detail, we are gravely told, was accidentally omitted, and this is the result. Explanations which can only be compared to the reasons given by those estimable people possessed of more goodness of heart than of wisdom when trying to account for the non-restoration to health of some one who had something the matter with him and had been prayed over by the brethren possibly for months together.

Herbert Spenser in his essay on the coming slavery says, that when railways were first opened in Spain peasants standing on the track were not unfrequently run over, and that the blame fell on the engine drivers for not stopping,—rural experiences having yielded no conception of the momentum of a large mass moving at a high velocity, and he goes on to speak of a political momentum which, instead of diminishing or remaining constant, increases. I think we might recognize a momentum in antiseptic theories—a momentum that seems to be carrying us into irrational and absurd practices, that after a time we shall be compelled to give up, but not without the loss of prestige and influence with the public. According to the present rate of progression we shall soon, when called upon to attend a case of midwifery be compelled to retire to our bath-rooms, wash and scrub in disinfectant solutions, don a fresh suit of disinfected clothes, and, like the Romish priests, when called to administer the communion at a person's residence, we shall go forth, preceded by couriers to clear the way and open doors, etc., etc., not daring to touch even a door bell knob, lest, possibly, an unclean mendicant has first handled and defiled it.

Would it not be better if our line of action were directed against more tangible sources of septic poison than the atmosphere we breathe. Instead of becoming machines, let us more carefully and intelligently avoid known sources of danger.

We, as general physicians, must attend diphtheria and scarlatina and peritonitis, etc., but if we do, before going from these cases to attend confinements, let us take those measures to ensure against conveying them to our patients which every-day experience proves to be sufficient, rather than inflict upon our patients a long detail of preventive treatment, which is repugnant, troublesome and costly, both as to time and money.

More than this, these very precautions which some would induce us to take to insure the safety of our patients may be made indirectly to increase this danger by rendering us less careful in avoiding known sources of contagion. When in Philadelphia a year ago, in conversation with Prof. Levis, he expressed himself as a thorough believer in Listerism. He told me that when going through Sir Joseph Lister's wards Lister remarked to him that his wards were æsthetically dirty but surgically clean.

That simply proved that it was possible by great care and by the use of every precaution to keep a surgical wound clean in an æsthetically dirty ward; but it shows the tendency to trust to these more showy and formal means of prevention, and to neglect the ordinary rules of cleanliness, which have been rightly said to rank next to godliness.

Let us first pluck the beam from under our finger nails, and then, perhaps, we shall see more clearly to pluck out the mote from the atmosphere.

VALEDICTORY ADDRESS.

Delivered on behalf of the Graduating Class of the Medical Faculty of Bishop's College, March 31st, 1885.

By the Rev. J. B. SAUNDERS, C.M., M.D.

We have reached to-day one of the goals in life's great race. The hopes of years to-day are consummated. The boding fears of many months now are dispelled for ever, and, armed with our letters patent, we gladly array ourselves for the stern battle of professional life.

We have sat in meekness at the feet of these "most grave and reverend Seigniors"—the amazement growing every day how those "small heads could carry all they know," and the still greater amazement, how we could store their instructio

all away and carry them up to our examinations ticketed and labelled ready to be fired forth at the given moment when the test questions should be launched upon us. But toil and patience, and perhaps some small modicum of "cheek" have pulled us through, and to-day we leave our Alma Mater and take upon ourselves the burdens and responsibilities of a Medical career.

Some time ago we felt it would be *such* a relief to escape from the professional eyes of those who overawed us with their learning and overwhelmed us with a most discouraging sense of our own deplorable ignorance. But now the hour has come at last: we find, mingled with an unmistakeable sigh of relief, an unmistakeable sigh of regret also. Your ardent love of the profession, your untiring researches after the hidden truths of science, your unceasing efforts to lead us to lay broad and deep the foundations of a true liberal medical education, your words of warning and counsel and encouragement have inspired us, not only with a deep interest in the studies of our profession, but also a deep love for the men to whom we owe so much.

I am sure I am but voicing the united sentiment of the students of Bishop's College when I say that we hope for and expect a great future for the Medical College of Bishop's University.

We believe she has a mission to perform in Medical Education in this land; we believe she is struggling nobly to accomplish that mission; and though other, older, institutions may now excel her in the number of her graduates, we can hardly think that one can be more loyal to the great facts of medical science or more liberal in embracing the latest revelations and sifting well the basis upon which the hypotheses stand. And we are quite sure that no similar institution has professors more deeply interested in the welfare of those who enroll themselves as students under their escutcheons. Let the professors toil together, lifted by their love of truth and their love of Alma Mater above all personal bitterness and sordid motives. Let the alumni stand firmly together, toiling for these great ends and helping each other by cheery words over the rugged steps of professional life, and the time will come, and will not tarry, when Bishop's College will number her graduates by the hundred, and her influence in this vast Dominion will rival that even of older and richer schools.

And now we have to say farewell to our professors. We have learned from you that the voracious Tinea Solium, the dreaded Tinea Medio Canellata, the nimble Bothio Cephalus Latus, the destructive Trichinæ Spiralis slumber unobserved in the luscious beef-steak and the toothsome pork chop; that Vacina float slily in the milk that is daily brought to our doors, and deadly Bacteria fill the air we breathe, and swarm in the water we drink; the cunning Bacillus, the insidious Microbe finds its way into every avenue of these mysterious organisms in which we live and move and have our present habitat, so now, being too wise ourselves to eat meat or drink water or breathe air, we go forth to help those whose carnal appetites still dominate their being and hold them in bondage to the merciless Bacteria. With Lister's atomizer in one hand, and Perrigo's irrigator and Campbell's insufflator in the other, we leave these classic halls to-day, swearing war to the knife against every infective germ and deadly contagium which macroscopy or microscopy has ever revealed.

We know now that if these wild and formidable creatures are caught young and evolved or rather involved some twenty generations backward, and reduced down by simple unstimulating diet they lose much of their native ferocity, and can almost be domesticated, so that 1-10,000,000 part of a grain of micrococci can impart a form of the disease so slight as not to keep a man away from his office more than one afternoon, indeed it may be so arranged that the sepsis can be imparted Saturday afternoon and leave the man ready for his Monday morning, without having lost one hour out of his business life, and yet fortified for ever against that disease for which he has received inoculation.

If we can only catch the foe whose delight it is to produce each particular form of deadly disease, and diet him down until he grows peaceful and harmless, and dole him out in minute doses, we can ensure our patients immortality, and prove to men everywhere that life, after all, may be made worth the living.

I may also say a word to my fellow graduates:—

Grand indeed is the field that stretches out before us. Bright are the hopes which beckon us on. Rich are the rewards which invite us. It will be ours to labor in three great departments of toil: The prevention of disease, the alleviation of human suffering, and the saving and prolonging of human life. In the first of these much, very much, still remains to be done. The known laws

of Hygiene are sadly neglected almost everywhere Even this famed city has few, appallingly few, houses, even of the wealthy and intelligent, the hygienic arrangements of which are anything like perfect.

The public generally, and our aldermen in particular, need to be aroused at this time to the great principles of Sanitation.

It will be ours, too, to relieve the suffering of our fellows. · What task can be more inspiring and draw more largely upon our better natures than that. If we are true to ourselves and our profession many a suffering one will bless our coming and many an anxious heart will find relief in our words of cheer. But, above all things, let us learn to be loyal to truth. Oliver Wendell Holmes says a physician's first duty is to his patient—himself second always. Strong temptations lie before us. The temptations of empiricism and quackery. A "Rule of Thumb" practice is the easiest thing in the world to fall into, and is most disastrous to the profession and dishonest to the patient. He has a right to our best thoughts, our most painstaking care and research even though he be too poor to remunerate us with anything but thanks, and too careless even to do that.

If we undertake his case we are bound by every law, human and divine, to devote our whole energies to his welfare, every phase of the disease and every sympton of the malady should be carefully guarded, and untiring efforts should be put forth for his recovery. We shall be tempted to deceive. Who is not? every profession lies open to the temptation. The most earnest minister may plead guilty to keeping back part of the truth, not because he fears a trial for heterodoxoy perhaps but because he firmly believes the whole truth is hardly best for his congregation in its present condition, and the greatest good to the greatest number is accomplished by but a partial unfolding of the truth—strong meat being reserved for the more mature. Perhaps he is wise, but is he honest?

The lawyer faces men sworn to tell the truth the whole truth, and nothing but the truth, and yet he uses all his powers to extort from him only that portion of the truth which is most advantageous to his client. Perhaps he is wise, but is he honest?

The Physician, too, will be tempted. He must give a prescription with three ingredients and a vehicle. It would not be orthodox else, even though he knows full well that what his patient needs is fresh air and clean water and soap. Perhaps he is wise, but is he honest?

He must give a diagnosis, though the case is undeveloped and involved. Pathonominic symptoms have not yet revealed themselves, nevertheless anxious eyes are upon him, appealing accents ring his ear. He must look learned and confident and serene. Perhaps he is wise, but is he honest?

He must give a prognosis, even though he knows a true prognosis will hasten the last act of life's great tragedy, throw gloom over a happy home, and strike dismay into loving hearts; he hesitates, falters, prevaricates, fabricates false hopes, and invents a prognosis to suit the occasion. Perhaps he is wise, but is he honest?

Well, let us resolve, whatever comes, we will be honest, and if we cannot be honest at least let us resolve to be as honest as we can. And now, right here our paths diverge. But we shall travel in cycles, and, however divergent they may be, be sure they will converge at last to the feet of the Infinite.

Let us act, then, so that in that moment our retrospect will bring us at least these thoughts: that we have done our part to chase away vice and crime, to dispel ignorance, to lift opinion to a loftier seat, to blot the era of oppression and superstition out and lead an universal freedom in.

Progress of Science.

TREATMENT OF DISEASES OF THE STOMACH.

BY DR. M'CALL ANDERSON.

In the first rank must be placed diet and regimen, as many disorders can be cured by attention to them alone, while few can be treated successfully without them.

As an instance of a disease in which they are indispensable, let us take the case of ulceration of the stomach. In this affection absolute rest in bed is generally indicated, although I am by no means prepared to deny that many can and do recover without it. Here the diet must be of the simplest kind, given in small quantities, and at short intervals; and a good rule for our guidance is, that *anything which causes pain or sickness*, and this remark applies almost universally to all affections

in which these symptoms are present—is injurious. Milk, in combination with lime, Vichy, or seltzer water, and well iced, is usually the best; or if this does not agree, butter milk or koumiss, or peptonized farinaceous food (such as that prepared by Savory & Moore) or what is known in commerce as "Solution of Meat" may be tried; the quantity administered at a time being reduced to the point it which it occasions no discomfort Even a teasponful may be all that can be borne at once and it is much better to give a very small quantity which is retained than a larger amount which disagrees. In extreme cases the best practice by far is for a time to suspend the administration of food by the mouth altogether, and to feed the patient *per rectum*, allowing him, however, to slake his thirst by sucking a small piece of ice occasionally. The enemata which I have latterly been in the habit of using are Savory & Moore's "nutritive enema "and "Carnrick's beef peptonoids." Leube's meat pancreatic clysters—a solution of meat treated with pancreatine—are also worthy of trial. But it must never be forgotten that feeding *per rectum* is only a temporary expedient, with the view of giving perfect rest to the affected organ, because the co-operation of all parts of the digestive tract is required; Voit and Bauer having shown that the rectum is only capable of absorbing about a quarter of the albumen necessary for the maintenance of life with the addition of fat of hydrocarbons. And yet, in the case of an eminent citizen well known by reputation at least to all of you whom I saw several times in consultation, life was maintained for a whole month by the use of nutritive enemata alone, not even a drop of water having passed his lips during the whole of that time.

Dr. Debove does not approve of milk diet, owing to its tendency to dilate the stomach. He prescribes three meals daily, each composed of 25 grammes of meat powder mixed with 1 of burned magnesia, 2 of prepared chalk, and 1 of sacharrated lime; and a quarter of an hour after each meal he administers 4 grammes of bicarbonate of soda. The gastric juice is thus neutralised and no peptone are formed in the stomach. On the other hand many are in favor of a method of treatment, whose principal exponent is Prof. Ziemssen, and which consists in the administration every morning of an alkaline aperient whose basis is Glauber's salt. For this purpose he gives Carlsbad water, or the natural, or—best of all, because most aperient—the artificial Carlsbad salts dissolved in water. "I make my patients," he says, "take every morning, fasting a solution of from 8 to 16 grammes, or 2 to 4 drachms (one or two teaspoonfuls heaped up) of the salt to a pound (one pint) of water which has been poured on when boiling, and then the whole cooled down to about 44° R. A quarter of a pint is taken every ten minutes. Two or three motions are necessary; if the bowels are moved only once, or not at all, an enema should be used, and on the following morning the quantity of the salt should be increased by ½ or doubled, the quantity of water remaining the same. Subsequently as a general rule less concentrated solutions are sufficient and then the patient may return to a teaspoonful of the salt to a pint of water. In cases where the gastric catarrh is very intense, and the pyrosis particularly obstinate it will be found advantageous to administer every evening duriug the first week, another bottle of an acidulous soda water (Giesshübel, Bilin, or Vichy). "The carbonate of soda, the chloride of sodium, and the Glauber's salts neutralise the acids and check the fermentation. They therefore suppress the corrosive action upon the floor of the ulcer, and the reflex contraction of the pyloric muscular fibres, and by their strongly excitant action upon the peristaltic movements of the stomach they cause the fermenting liquids to be rapidly discharged into the bowel. It is evident that if the stomach is thoroughly emptied, at least once a day, its contents are much sooner rendered temporarily alkaline, or neutral, and their tendency to fermentation restricted."

In many cases of ulceration sedatives, such as small doses of morphia with bismuth and hydrocyanic acid, are valuable, but constipation is apt to be induced or aggravated by such medication, and then they may be combined with the use of the alkaline aperient above mentioned or resort may be had to the black oxide of maganese–a gastric sedative not so well known, which was introduced by the late Dr. Leared—and which, in doses of 10 grains, has proved most useful in my hands for this and similar condtions. In chronic cases small doses of arsenic —from one to two minims of Fowler's solution three or four times a day often yield the best results.

In acute catarrh of the stomach, even greater care is required as to food than in the case of ulceration. Indeed, on the principle of keeping an inflamed organ at rest, it is often the wisest course to abstain altogether for two or three days from the administration of food by the mouth, although ice may usually be sucked with comfort and advantage. Hot applications to the epigastric region often afford some relief, while calomel is one of our sheet-anchors, especially for those in whom it acts as a gastric sedative, and checks vomiting; it may be given in a dose of 5 grains, which may be repeated in a day or two, if need be, or in smaller doses at shorter intervals. In addition to this other gastric sedatives, such as those already mentioned, may be used, but none are so likely to prove beneficial as the subcutaneous injection of morphia. If there is great exhaustion, a little well-iced champagne may be tried from time to time, and as the symptoms subside, the utmo st caution must be observed in improving the dietary.

It is often difficult to say whether we have to deal with dyspepsia or with chronic catarrh of the stomach (inflammatory dyspepsia as it is sometimes called). We may, however, suspect the existance of the latter if there is slight fever at night with some loss of flesh, if the tongue is coated and

red at the tip and edges, or red smooth and glazed, or raw looking; if thirst is present, if the uneasiness after food ever amounts to pain, if there is tenderness in the epigastric region, if there is nausea or vomiting, if mucus is vomited in the mornings, and if the urine is high colored and deposits lithates. Having satisfied ourselves that we have to deal with chronic catarrh, our first aim in treatment is to remove the causes—such as irregularities of diet and regimen. constipation, the excessive use of stimulants, gout, disease of the kidneys, obstructive disease of the liver, lungs, or heart—which we must attack on the same principles as we would do if they occurred independently of stomach catarrh. This having been done, and the symptoms persisting, we may resort to the use of occasional doses of calomel and of saline purgatives—such as Friedrichshalle, Hunyadi Janos, Püllna, &c., or a visit to one of the more celebrated spas—such as Homburg, Kissingen, Carlsbad, or Wiesbaden, may be recommended. When there is evidence of fermentation in the stomach—flatulence, acid eructations, &c.—permanganate of potash is specially to be recommended, and often speedily gives relief.

In the later stages the saline treatment may be combined with tonics—the sulphate of magnesia mixture ni combination with sulphuric acid, strychnia, and columba for example. The diet must all along be most carefully regulated, consisting of milk, beef-tea, and farinaceous food, while, in the slighter cases, fish, poultry, and game may also be allowed. The meals should be small, and not too numerous; and, as a rule, all stimulants should be strictly forbidden. During convalescence, tonics may be cautiously administered—being selected in accordance with the surroundings of each case.

Arsenical treatment has already been alluded to as being sometimes useful in cases of ulceration, but there is another class of affections in which it, as well other anti-neuralgic remedies, is sometimes of the utmost value—viz., "neuroses of the stomach." These usually give evidence of their presence by the occurrence of pain of a neuralgic character, or of vomiting. Such cases are very apt to be mistaken for ulceration on the one hand, and dyspepsia on the other; and we may frequently aid our diagnosis, as well as contribute to their successful treatment, by means of diet, for the symptoms are sometimes relieved by giving nourishing food—even solid, hot and stimulating, food—and by administering stimulants, while those of the above-mentioned disorders are pretty sure to be aggravated thereby.

In other cases the stomach pain is but a symptom of chlorosis, and its true nature may be suspected if there is an absence of other symptoms of stomach disorder on the one hand, and the presence of waxy pallor of the surface and other symptoms of chlorosis on the other; but care must be taken to exclude ulceration, which is by no means an uncommon complication in chlorotic subjects. In this class of cases iron in full doses constitutes our sheet-anchor, and nothing in my experience answers better than a prolonged course of Bland's pills.

Nor must we forget that these neurotic symptoms frequently result from irritation of the spine, so much so, that I make it a rule in all cases of doubt to examine the spinal region, even when the patient makes no complaint of backache, to ascertain whether there is any spot which is tender on pressure; and I have been surprised to find how often there is tenderness in the dorsal region which had never before been suspected. Such tenderness is all the more likely to be present if the gastric are accompanied by other symptoms, such as hard barking cough, or localised pain beneath the left breast. When the mischief lies in the spine it is needless to attack the stomach, but leeches, and counter-irritation by means of fly-blisters over the tender parts, along with rest, tonics, and careful attention to the general health, constitute our sovereign remedies. As an illustration of this, let me recall the case of a weakly young woman who was under my care in June, 1879, and who came complaining of persistent vomiting of several months' duration. The vomiting was easy and painless, and there was no preceding nausea nor any sensation of pain while the food lay in the stomach; it was accompanied by hard, dry cough. The vomited matters consisted of undigested food, mixed with green streaks and patches, and blood was never observed to be present. The regurgitation of the food went on getting worse, occurring after every kind of food and at gradually decreasing intervals after meals, sometimes even taking place during the act of eating. All kinds of stomach remedies, including the application of a fly-blister to the epigastrium, had been tried ineffectually, and when I saw her she was not only in a state of the greatest debility but more emaciated than almost any patient I have ever seen. On examination of the spine, distinct tenderness was discovered for a distance of about 2 or 3 inches at the junction of the middle and lower dorsal regions. A fly-blister was applied over the tender part, and after it rose the vomiting entirely ceased, except on one occasion, after taking some purgative medicine. From that day onwards she never looked behind her, and made a rapid and excellent recovery.

Again, as is well known, irritability of the stom ach, in a very tractable form, may set in during the first half of pregnancy. It may sometimes be removed by careful attention to diet and regimen, and by the administration of gastric sedatives, such as those already mentioned, or by the use of the oxalate of cerium, a favorite remedy with the late Sir Jas. Simpson. But, as has been clearly stated by Dr. Graily Hewitt, it is in many cases the result of interference with the normal expansion and growth of the gravid uterus—there being two factors, both of which may be conjoined in a given case, capable of producingt his—viz.,(1) incarcera-

tion with flexion or version; and(1)hardness and rigidity of the os and cervix, the first being much the more important of the two. The second factor is likely to be removed, and with it the vomiting, by Dr. Copeman's plan of dilating the internal os; while the first is obviated by raising the uterus from its displaced position, and if this can be done, the vomiting almost invariably ceases.

In the last resort we must relieve the condition by the induction of premature labor, which should be done before the strength of the patient is reduced to too low an ebb.

Of the treatment of that hydra-headed monster, dyspepsia, time will only permit of my giving one or two illustrations. Let us take the case of a full-blooded man of sedentary habits, who indulges in the pleasures of the table, and whose bowels are habitually costive. He has bad teeth or eats his food very quickly; he dines in town, making for the nearest restaurant and snatching a hasty meal of very miscellaneous and often badly cooked food. He has frequently headaches, or a feeling of "swimming in the head," which may be the immediate cause of his seeking advice. We find that his tongue is habitually coated, that his appetite is defective, that he has a craving for food, and after a meal he has "a load at his stomach," or complains of a feeling of distension, from which he finds relief by loosening his clothing. At times, too, he may suffer from uneasiness in the hepatic region or in the shoulder, and his liver may even be slightly tender on pressure.

I have taken as an illustration a typical case such as we often meet with in business circles, and which cannot readily be mistaken, but minor forms of the same condition are very apt to be overlooked, especially if our advice is sought for some ailment indirectly produced or aggravated by the dyspepsia, such as asthma or eczema, or gravel.

In such cases the bowels must be carefully regulated, and occasional doses of antibilious medicine —than which nothing is better than calomel—are indicated, or a course of Friedrichshalle or Hunyadi Janos, or of the mineral waters of Harrogate, Homburg, or Marienbad.

This treatment is, however, only of temporary service, unless at the same time, we remove the causes by making complete change in the diet and regimen.

Our patient must be instructed to take plenty of exercise in the open air, to pay a visit to his dentist if need be, to have his meals with regularity, to eat slowly, and in great moderation, to chew his food thoroughly, even soft food being well mixed with the saliva before it is swallowed—in a word, he must be instructed to do as much as possible in the way of division and digestion of his food in the mouth, so as to throw less work upon the lower portion of the digestive apparatus.

He should dine off two or three dishes, and should, for the most part, avoid many articles of diet in every day use, such as tea, coffee, spices, and stimulants, oatmeal, cheese, pastry, soups, containing vegetables (such as hotch-potch), potatoes, raw vegetables (such as salads), and unripe fruits, fresh bread-stuffs of every kind taking toast, pulled bread, rusks, or plain biscuits instead—sweet things, unless of the simplest (such as rice pudding or stewed apples). Butchers' meat should be partaken of in small quantity, veal and pork being eschewed—raw meat is much harder of digestion than cooked, boiled than roast, old than young, and fat than lean.

A very different form of dyspepsia is one which, from a clinical point of view, may be described as weak digestion (one variety of which is the so-called atonic dyspepsia), and which is apt to be acquired by long-continued abuse of the organ of digestion, although it may occur independently of such causes, being, so to speak, natural to the individual.

The more such persons are in the open air the better, although care must be taken, in the case of those who are weakly, that exercise is short of fatigue, and intervals of complete relaxation from work and worry, with change of air and scene, are frequently beneficial, while a course of mineral waters at one or other of the more noted spas—such as Homburg, Carlsbad, or Spa—which must be selected in accordance with the surroundings of each case, may prove of much service.

The diet must be regulated with the greatest care, the food being nourishing, but light and easy of digestion. The meals should be frequent but small, fluids being taken only at the end of each, and in many cases, with the principal ones, a dessertspoonful of whiskey in potash water may be prescribed with advantage.

Tonics are frequently beneficial—especially vegetable bitters, strychnia, and arsenic—in combination with acids or alkalies, but they must be skilfully selected, for their action in different persons is very capricious and uncertain. It is in this class of cases *par excellence* that artificial aids to digestion are indicated, which consist chiefly in the use of pepsine in some shape or other, or of acids. A fresh extract of the former may be readily made according to v. Wittich's method, with glycerine as follows. The mucous membrane of a fresh pig's stomach is minced, thoroughly washed, and treated with strong alcohol, which does not affect the pepsine, but lixiviates the salts and precipitates a portion of albumen—500 ccm. of glycerine are then added; in 24 hours the extract is filtered and ready for use, the dose being 3 i or more. For those who are practising in country districts, or where expense is an object, this preparation is specially worthy of trial. For my own part I am in the habit of prescribing Benger's liquor pepticus; but there are other preparations, such as Liebreich's pepsin-essenz, which may perhaps be preferred by some.

In the majority of cases, however, it is the hydrochloric acid of the gastric juice, and not the pepsine, which is deficient, and which is

therefore much more frequently required, the dose being 8 to 10 minims of the diluted acid in a glass of water after each meal. The old-established practice of giving acid mixtures in cases of fever—during which the activity of the gastric juice is impaired—is partly due to this circumstance. It must never be forgotten that hydrochloric acid may be indicated, even when the gastric juice is very acid—as the result, for example, of acetic or butyric acid fermentation; for it takes a much greater degree of acidity to effect healthy digestion with them than with hydrochloric acid, the normal acid of the gastric juice. In order to ascertain whether it is the pepsine or the hydrochloric acid of the gastric juice which is defective, Prof. Leube adopts the following plan in some cases—"I let the patient take about 25 grammes of Carlsbad salt on an empty stomach, so as to cause anything which may remain in it to pass downwards; then about noon some plain cold roast veal, with or without bread. In from one to two hours afterwards I take out a portion of the contents of the stomach with the stomach sound, and convince myself concerning its smell and reaction, as well as how far the process of solution has advanced in the pieces of roast meat. I next put into three bottles equal quantities (about 50 cubic centimetres) of the filtered contents of the stomach, and hang in each of them a bundle of boiled fibrin of about equal volume. Into one of these bottles I put nothing further, into the second two drops of hydrochloric acid and into the third two drops of a neutral solution of pepsine. All three bot tles are then placed in a large vessel of water, the temp. of which is kept at 95°-104° F. The digestion which takes place in the last two bottles will show whether one or other of the additions effects a more rapid solution of the fibrin than occurs in the first bottle, or whether they remain without import."

There are two or three other aids to digestion from which I have occasionally derived benefit—such as lactopeptine and ingluvin while Benger's liquor pancreaticus (which should be given in doses of 3 i in a glass of water two or three hours after food—*i. e.*, when it is leaving the stomach), is specially indicated in cases of failure to absorb fats; but, on the whole, we are more likely to do good to our patients suffering from weak digestion by the administration of hydrochloric acid, or of liquor pepticus than of the above-mentioned preparations.

While there may be doubt as to the propriety of drawing off the contents of the stomach with the view of ascertaining whether the gastric juice is deficient in acid or in pepsine, there can be no question of the necessity of washing it out in cases of dilatation. For this purpose various solutions may be used—such as Vichy water, or lukewarm water containing 10 grains of pure carbolic acid, or 10 minims of creasote, or a drachm of hyposulphite of soda to the pint. But in addition to the daily use of the stomach tube, the diet must be carefully regulated so as to keep the organ as empty as possible consistent with fair nutrition of the system. The food should, therefore, be concentrated, given in small quantity and at short intervals; and it may be supplemented, if necessary, by the use of nutrient enemata. In order furthur to favor contraction of the distended viscus, an abdominal support may be worn, or faradisation resorted to (one of the sponges being applied over the epigastric region), and tonics, especially strychnia and nux vomica, are indicated.

It remains for me to refer to the question of operative interference in cases of obstruction at the pyloric orifice of the stomach, such as results from fibroid or cancerous disease, or from the cicatrization of ulcers—a subject which has been carefully considered by Dr. L. Rydygier in Volkmann's *Sammlung Klinischer Vortrage*, to whom I am largely indebted for the following facts: Merren was the first (in 1810)—and later Gussenbauer and v. Winiwarter—to prove that resection of the pylorus was quite a feasible operation in the case of the lower animals. But for all that it seems never to have been attempted in the human subject until 1879, when Péan of Paris, at the urgent request of a patient, cut out a carcinomatous pylorus. Death, however, ensued five days thereafter. On the third occasion upon which the attempt was made, on account of a similar condition, in 1881, the operator being Billroth, the patient made a good recovery, but died five months afterwards, owing to a relapse. Altogether, from April, 1879, till May, 1882, the operation seems to have been performed 23 times. Of these operations, only 5 were successful.

It must be admitted, therefore, that the results hitherto have not been brilliant; and yet, when we remember that the disease from which most of the patients suffered was certain otherwise to terminate fatally, it is some consolation to know that even a small proportion of them were restored to health by operative interference; and there is little reason to doubt that—just as in the case of ovariotomy—when the rules for carrying out the operation are more thoroughly understood, and further experience has been accumulated, the death-rate will be materially lowered. The operation is specially to be recommended when there is reason to believe that the obstruction is not of a malignant nature, or, if malignant, that the cancer of the pylorus has not seriously encroached upon the pancreas or other structures in the vicinity; and it is probable that earlier resort to the knife, and before exhaustion is extreme, may lead to greater success.

I cannot conclude without referring for a moment to the operation devised by Dr. Loreta, of Bologna, for cases of non-malignant contraction of the pyloric and cardiac orifices. This consists in opening the abdomen, and making an incision

into the stomach, through which the index finger of the right hand is introduced, and with which the orifice is forcibly dilated. The cardiac orifice cannot be reached with the finger, so that a metallic dilator is used instead. In a letter from Dr. Pedrazzoli, we are told that up to July 15, 1883, Dr. Loreta has in this way forcibly dilated the pylorus four times, and the cardiac orifice once. All of these operations were successful, although one patient is said to have died 36 hours after the operation "from causes entirely independent of the operation," and the evidence is in favor of the permanency of the cures. We may, therefore, look forward with confidence to the results of subsequent attempts in the same direction.

In cases of malignant obstruction at the cardiac orifice, we may sometimes prolong life by the formation of a fistula, or by introducing food with the aid of a narrow gum elastic tube.—*Glasgow Medical Journal, March.*

ON THE TREATMENT OF CATARRH OF THE RESPIRATORY PASSAGES— ACUTE NASAL CATARRH.

By I. Burney Yeo, M.D., F.R.C.P., Physician to King's College Hospital.

Now-a-days a "catarrh" means an abnormal increase in the secretion of any mucous membrane, due to hyperæmia, or inflammation of the same.

This inflammation may be *acute* or *chronic*, slight or severe, a mere passing irritation, or a more or less permanent malady. So that we now not only speak of *nasal*, *pharyngeal*, *laryngeal*, and *bronchial* catarrhs, but also of gastric, duodenal and intestinal catarrhs, catarrh of the bile ducts, but also of vaginal, urethral, vesical, and uterine catarrhs; meaning in all these cases an inflammation (or hyperæmia) of a mucous membrane, attended with an increase of or a modification in, its natural secretion. For the present we are only concerned with catarrhs of the respiratory mucous membrane, and first of all, we shall consider the occurrence and management of that very common and often distressing form of catarrh which is variously termed "coryza," "rhinitis," "nasal catarrh," or, more commonly, "cold in the head."

I need scarcely tell you that the lives of certain persons are troubled by a tendency to constantly "catch cold," as it is termed. I regret to say I am myself not free from this predisposition. But it is a curious fact that while some persons have a proneness to become afflicted with nasal catarrh, others will exhibit a tendency to pharyngeal catarrh, others to laryngeal, and others to bronchial catarrh. There are persons who are frequently the subects of nasal catarrh and even of laryngeal catarrh, but who never suffer from bronchial catarrh; and, conversely, there are many who although frequently the victims of bronchial catarrh, never suffer from nasal or laryngeal catarrh.

In my own personal experience, I find a nasal catarrh will, if neglected at its onset, occasionally extend into the larynx; but it stops there, and has never yet extended lower along the respiratory passages. To antagonise this predisposition to catarrhs of the air passages is an important consideration in their management. So also is the possibility of their spread by contagion. It is a popular belief that "colds in the head" are catching; and it is certainly remarkable the way in which they run through families and households.

Some account for this by assuming the existence of an "epidemic" influence associated with meteorological conditions, and no doubt these affections are at times epidemic, but they frequently occur and spread through families when their origin and extension cannot be so accounted for. Fraenkel remarks that he has often observed bridegrooms who have never before suffered from coryza, become attacked by this malady on marrying brides who have been prone to such attacks!

The chief cause of nasal as well as of other catarrhs of the air passages is no doubt the existence of an undue impressionability of certain portions of the surface of the body to even slight changes of temperature. Also the extreme excitability of the nasal mucous membrane in some persons to the contact of certain substances is a well-known cause of catarrh. The pollen of grasses and other plants produce in some persons distressing attacks, of so-called "summer catarrh" or "hay fever." The perfume of a rose has been known to have the same effect, and I have seen the most distressing attack brought on by turning over the leaves of a book that had long been undisturbed on the library shelves.

The treatment of acute nasal catarrh may be conveniently considered under three heads: 1. Prophylactic treatment. 2. General remedies. 3 Local remedies.

(1) *Prophylactic Treatment.*—The predisposition to suffer repeatedly from attacks from coryza. may be greatly diminished by suitable prophylactic measures. The most important of these is the adoption of some hardening process which shall have for its object the removal or diminution of a certain hyper-sensitiveness of the skin and mucous membrane which characterises such patients.

Avoidance of sedentary habits and free exercise in the open air are of great value. Cold affusion over the head and neck, begun in warm weather and steadily maintained throughout the whole year, is of undoubted efficacy. The use of the *shower-bath* for this purpose has been strongly advocated, but there are not many persons who can tolerate a cold shower-bath all the year round, but most persons can bear two or three large spongefulls of cold water wrung out over the head and neck on first rising in the morning. This process imparts contractile vigor and tone to the superficial vessels, and counteracts the tendency to vascular dilation, and hyperæmia, upon which catarrhal conditions mainly depend.

A tendency to nasal catarrh and to other catarrhal states is excited and maintained by residence in low-lying, damp, cold situations; and it is hopeless to endeavor to relieve, permanently, such conditions while the subjects of them continue to dwell in these localities. It follows that one of the best prophylactic measures against attacks of nasal catarrh is residence in a dry, bracing locality. No measure is perhaps so efficacious as a preventative to such attacks as a few weeks' residence in a high, open mountain valley like that of the Upper Inn in Switzerland. I have myself experienced this in a remarkable degree. The dry, cold, bracing air of this region seems to be of especial value in lessening the morbid sensitiveness of the surface, so far as it tends to the production of catarrh of the respiratory tracts. I believe it acts partly by causing contraction of the superficial vessels and increasing their tone. It is quite otherwise with respect to the tendency to suffer from rheumatic pains when exposed to atmospheric vicissitudes. In such cases the climate of the Engadine generally aggravates the rheumatic tendency; and this it probably does by checking cutaneous transpiration. (I have entered fully into this subject in some of the chapters in my work on "Health Resorts and their Uses.")

Next in value to mountain air, as a prophylactic, is well-directed sea bathing, during the summer months, associated with abundant exposure to the open air of the seaside. Such patients should not be allowed to remain long in the sea at one time; it is better they should make repeated plunges, for it is the bracing shock to the surface that is required, not the continued contact of the cold sea-water. At Biarritz they have a plan of standing just ankle-deep, or but little more, in the sea, and allowing the Atlantic surf as it comes in to dash over them—one of the best natural douches that can be imagined. Persons who suffer from summer catarrh or "hay fever," are often immediately relieved on removal to the sea coast. This treatment of combined sea-bathing and sea-air is of the greatest value to scrofulous children who frequently show a tendency to attacks of nasal catarrh, which sometimes become chronic, and give rise to much trouble; for chronic nasal catarrh in scrofulous subjects is a most obstinate malady, and one difficult to treat with success.

(2). Next with regard to *General Remedies.*—Of all the general remedies advocated for the cure of attacks of coryza, opium or morphine is by far the best. I have again and again tested its value, and often in my own person; and if it fails to cure or cut short a cold in the head it at any rate takes from it all its terrors! Opium undoubtedly exercises a remarkable effect over the capillary circulation, especially in the respiratory mucous membrane, and I have often known a single dose of opium completely arrest a catarrhal fluxion from the nose, which, from its abundance, entirely prevented sleep, and this in fifteen or twenty minutes.

But it is by no means a matter of indifference what method you adopt in administering the opium. When you are able to treat the cold quite in its initial stage, when the nasal mucous membrane is only a little swollen and dry, and there is an uneasy feeling over the frontal sinuses, and before the occurrence of any great amount of fluxion, the following I believe to be the best method:—Supposing the patient to have had a good meal in the middle of the day, no more solid food should be taken that day, but about three or four hours before bedtime an eighth of a grain of acetate or sulphate of morphine (I use McKesson and Robbins' pilules of this strength) should be taken with a small cup of weak tea; and at bedtime another eighth of a grain with a wine-glassful of whiskey and water.

This measure alone will constantly arrest a cold in the head if adopted in the initial stage; and even when this stage is passed it will relieve all the uncomfortable distressing feelings which attend these attacks. Yet you will often find it fail; but it fails because both patients and doctors will not attend to small details. If you do not caution your patient to the contrary, he will probably eat a heavy evening meal, following the old-fashioned maxim of "feeding a cold," and take his dose of morphine on a full stomach. Now it makes all the difference in the world whether this small dose of morphine be absorbed into the blood in a few minutes, or whether it be mixed with a mass of food and absorbed slowly with it after some hours. The result in the two cases is wholly different. In the first case you have a definite quantity of your remedy immediately absorbed into the blood and circulating with it; in the second, your remedy is slowly absorbed in indefinite quantity, and there is no reason that I know of why some of it should not pass out of the body in the residue of the food with which you have allowed it to be mixed!

When the initial stage is passed, and the nasal fluxion is thoroughly established with a distressing feeling of oppression and stuffiness about the nasal passages and frontal sinuses, I have found the following diaphoretic draught, containing opium, to be of the greatest use. I have taken it myself and given it to others for many years:—℞ Liquor. opii sedat. Mxv; vini ipecac. Mv; sp. ætheris nitrosi 3j; liq. ammoniæ acet. 3iij; aquæ ad camphoræ ad ℥iss. To be taken at bedtime.

If the patient is able to keep to the house, and, better still, to one moderately warm room for a day or two, a single dose of this kind will not infrequently remove all the catarrhal symptoms permanently as well as immediately. But although it will surely give immediate relief, yet, if the patient exposes himself to changes of temperature the next morning the catarrhal condition will frequently return. Opium given in this form is not attended by the unpleasant effects generally found to follow its administration in the crude, solid form, such as headache, nausea, loss of appetite, &c.

Some feverishness and slight rise of temperature frequently accompany these attacks, and in these,

and indeed in all cases of the kind we are considering, we shall do wisely to give quinine in doses of one to two grains, three or four times a day. It is a valuable adjunct to the opium treatment. I am accustomed to give it in effervescence in the following form, which seems agreeable and refreshing to patients:—℞. Potassæ bicarb. gr. cxx.; ammoniæ carb. gr. xxxii.; syrupi aurantii ʒiv; aquæ ad ʒviii. M. ft. mist,—℞. Quiniæ sulph. gr. ix.; acid citrici gr. cxx. In pulvi. vi. One of the powders, dissolved in water, and mixed with a sixth part of the mixture, to be taken three or four times a day.

In children and young people, when an attack of coryza is attended with decided feverishness, and particularly if the throat is involved, and its mucous membrane is found red and swollen, great benefit will follow the administration of a few doses of aconite. Indeed, aconite is extremely valuable in all the ephemeral and symptomatic fevers of children and young people. I am in the habit of using Schieffelin's pilules of Duquesnil's aconitine $\frac{1}{100}$ gr. in each. I give one of these every two hours for three doses, and stop. Or you may give from one to three minims of the tincture (according to the age of the patient) every hour for three or four doses, and stop. My own experience of aconite teaches me that it is a drug which either produces an immediately beneficial effect, or is of no value. It is also a drug which is of much value in the initial stage of many febrile maladies, but of little or no use in advanced stages. I should advise you, with regard to the internal use of aconite, to adopt this rule: give it only in a few doses at a time, and in the initial stages of disease; never increase this dose largely, with the hope of obtaining better results from a large dose than you have been able to get with a small one. It is of more apparent benefit in throat catarrhs than in nasal or laryngeal catarrhs. I should rely, in the treatment of acute coryza, rather on opium and quinine; but in children, and in persons who cannot take opium or quinine, you may give aconite, in the way I have stated, with advantage.

Camphor is a popular remedy for coryza; a few drops of the spirits of camphor, dropped on sugar or taken in water, every half hour, will in certain persons arrest a cold in the head, if taken in the initial stage; but it is useless when the stage is passed, and not to be compared in efficacy with opium or morphia, given in the manner I have enjoined. Several cases are on record of poisoning by so-called homœopathic tincture of camphor, taken, in repeated doses, for this purpose.

There is what is called the *dry* cure, which was introduced by Dr. C. J. B. Williams. It consists in stopping the supplies of all liquids; and so, by not adding any water to the blood, while the system withdraws from the blood the fluid required for the natural secretions, the quantity of fluid in the blood vessels is diminished and the local hyperœmia thereby lessened. The catarrh ceases because the supply of fluid to the blood is cut off! The amount of fluid permitted was a tablespoonful of milk or tea with the morning and evening meals, and a wine glassful of water at bedtime. But this has never been a popular method—the remedy appearing to many persons worse than the disease.

(3) Lastly, we have to consider the action of *Remedies applied Locally*. It is rarely necessary to apply any local treatment to acute nasal catarrhs, such treatment is more useful in the chronic forms of catarrh.

A common and popular method of attempting to cut short an attack of coryza is to inhale the vapor given off by a mixture of ammonia, carbolic acid, and rectified spirit. This mixture is dropped upon some absorbent substance introduced into a bottle and the vapor given off is inhaled by the nostrils. When there is much distress from swelling and dryness of the nasal mucous membrane, relief may be obtained by the inhalation of moist soothing vapors; the vapors of hot water, or of infusion of camomile, or of elder flowers, or of the decoction of poppy heads. These vapors may be inhaled from the orifice of a narrow-mouthed jug, which, together with the mouth and nose of the patient are covered with a towel, or they may be conducted directly to the nostrils by an india rubber tube connecting with the steam generating apparatus.

When the secretion is profuse and the nostrils feel blocked up, benefit is sometimes obtained by the application of a warm spray of a weak solution of common salt or carbonate of soda (2 to 6 grains to the ounce), or Ems water, for a quarter of an hour at a time, for four or five times a day. Some have strongly recommended the snuffing up of a powder composed of bismuth, tragacanth powder and morphine, in the early stage of nasal catarrh. But many persons object strongly to the introduction of a sticky powder into the nostrils.

You will often find during or after an attack of acute nasal catarrh, that the catarrhal condition will extend into the pharynx and spread not unfrequently to the mucous membrane of the upper part of the larynx. The patient will then complain of an uncomfortable feeling in the throat, especially in swallowing his saliva, and he will often also be tormented by a troublesome tickling cough. This cough is generally aggravated during and after meals, and is particularly annoying on lying down in bed at night. On looking into the throat you will usually find the soft palate and uvula somewhat relaxed, a spongy aspect about the tonsils, and the mucous membrane of the pharynx redder than usual and covered with whitish mucus in patches or streaks. The reason why, in some of these cases, the patient only complains of cough when he assumes the horizontal position is because then the larynx falls back against the posterior wall of the pharynx, and the drainage of the catarrhal secretion from the pharynx instead of flowing off by the œsophagus, trickles into the aperature of the larynx, and so excites

cough. Sometimes the trailing of an elongated uvule has the same effect.

When the cough is brought on by eating and drinking, the catarrhal state has probably extended to the upper part of the larynx, and the increased supply of fluid and nutritive material to the blood is attended by increased fulness of the vessels, and increased secretion from the catarrhal surface, thus giving rise to cough for its expulsion. Local treatment is of especial value in relieving these conditions. The mucous membrane should be cleansed of the more or less tenacious mucus adherent to it by alkaline sprays or gargles. Warm Ems and Barboule Water are both good for this purpose; or a warm spray of a solution of carbonate soda, 5 to 10 grains to the oz., to which a few grains of common salt and a few drops of glycerine are added may be advantageously used. These solutions may be applied by means of a hand spray or a Seigle's steam spray producer The mucus membrane having been thus cleansed by these alkaline sprays, astringent applications will now take much greater effect on the dilated vessels, and gargles and sprays of solution of alum, or tannin, or perchloride of iron will be found useful. Or stronger solutions may be applied directly to the pharynx by means of brushes. The glycerine of tannin of the British Pharmacopœia is a good application in some cases.

In some instances gargles containing both alkai line and astringent ingredients prove very serviceable, and many patients prefer them to the trouble of spraying. A good gargle for this purpose consists of 1 drachm of chlorate of potash, 2 drachms of aromatic spirits of ammonia, and half an ounce of tincture of catechu to 8 ozs. of water. Another good form consists of half-an-ounce of glycerine of borax, 1 drachm of chlorate of potash, half-an ounce of tincture of rhatany, and 8 ozs. of water.

If there is much laryngeal irritation an occasional lozenge of morphine and ipecacuanha will usually allay it. But in troublesome cases, you will find one of the most reliable resources for getting rid of the catarrh, and with it the teasing cough, is to brush the mucous membrane of the pharynx, the posterior surface of the soft palate and the upper part of the larynx, so far as it is readily accessible, with a solution of nitrate of silver, 10 grains to the ounce. I have found this expedient give speedy relief when other measures have failed.

Gargling the throat with ice-water before setting down to a meal, or before going to bed, will often in slight cases, prevent the attacks of cough of which I have spoken. In similar instances a gargle of port wine after a meal is both pleasant and serviceable.—*Medical Times.*

ON A NEW METHOD OF TREATING SPRAINS.

By THOMAS L. SHEARER, M.B., C.M., Edin., Baltimore, U. S.

Everyone who has sprains to treat in practice must have been at times annoyed by the slowness of recovery of the injured part. This is not so important in hospital patients, many of whom, enjoying the life, diet, &c., of these institutions, do not object to prolonged treatment; but in the wealthier classes in private practice the surgeon must often hear complaints that the injury is so long in recovering. I have had a considerable number of sprained limbs to treat, and after employing the usual plans of treatment, was led to adopt a new agent—clay. The clay is simply that used for making bricks, free from gravel, dried, and finely pulverized in a mortar. The powdered clay is mixed with water so as to form a thick and moist consistence. This is spread on muslin to the depth of a quarter of an inch, and applied entirely around the part. Over this is applied a rubber roller bandage, just lightly enough to keep the dressing from shifting and to retain the moisture. At the end of twenty-four or thirty-six hours the dressing must be renewed. It may be well to relate a few cases by way of illustration.

Case 1.—Mr. T———, aged fifty-eight, was thrown fron his carriage, and, in addition to other injuries, received a severe sprain of his ankle, completely in capacitating him from motion of any kind. The part was hard, swollen, intensely painful, and throbbing. The dressing, as above described, was applied, and in twenty-four hours the pain was almost entirely gone, and the swelling to a great degree had subsided. The dressing was renewed daily, and in eight days the patient was going about tending to his business The part was free from pain and natural in every respect.

Case 2.—Mr. Mc C——, aged sixty, slipped and sprained his ankle so severely as to confine him to bed. The treatment was the same as that employed in Case 1, and the patient was out and walking in the streets in ten days.

Case 3.—Mrs. A———, aged seventy-four, in stepping from her carriage missed her footing, and twisted her left knee violently. In a few hours the part was greatly swollen, hot, throbbing and painful; the least motion of the joint caused excruciating agony. Pressure over ligament was especially painful. Next day I saw the patient, and applied the clay dressing. The day after the patient was much easier, the swelling rapidly subsidding. The pain was almost *nil*, and the movement of the part was not followed by such distress. The lady was walking in her house in ten days after the injury.

Dr. Hewson, of Philadelphia, about ten years ago introduced earth as a means of treating fibroid tumors of the uterus, and also sprinkled burns with the dry earth, claiming that the tendency to deformity in the latter cases was lessened. However, I am not aware of sprains being previously dressed with clay, and it was thought as well to lay the efficacy of the method before the profession. A number of other cases could be cited, but they would simply be a repetition of those already mentioned. While speaking of clay, it would, perhaps

not be amiss to state that the powdered dried earth sprinkled on the surface of an ulcer, and adhesive straps applied over it is a capital dressing for cases which are so weak that even the weakest ointment tends to break down the granulations.—*Lancet.*

ON THE TREATMENT OF CHOLERA.

By the EDITOR OF THE *Lancet.*

Our object is not so much with questions of disinfection as with strictly medical questions of treatment. There is one point on which Dr. Koch is in practical agreement with medical practitioners—that is, the wisdom of rectifying all ordinary gastric and intestinal disorders during the prevalence of cholera. Nothing is more striking in his conclusions than the bactericidal function of the human stomach when in health and when reasonably treated by its owner. He never found the comma bacillus in the vomited matters, except where he had reason to suspect that they contained accidentally some fæcal contaminations. The stomach which is affected with gastric catarrh, whether from drinking or overeating, chill, or other cause, is likely to supply an amount of mucous-protection to the cholera bacillus which will secure its transmission unkilled into the intestine, especially the ileum, there to do its deadly work. It is an old point of medical observation that drunkards and other disorderly livers fall an easy prey in times of cholera. They will do well to mend their ways in time—to live "soberly and righteously,"—and if any indigestion or dyspepsia survive such a change in their habits, to apply without delay to their medical advisers. It is a vulgar impression in cholera times that nips of brandy have a preventative effect. Nothing can be more incorrect. Such a practice would be well calculated to produce that gastric catarrh which, as Koch and all other practitioners of experience agree, is most apt to give the cholera poison its best chance of operating upon the intestine.

There is nothing in Koch's researches contradicting the general opinion of the profession that by far the best thing in cholera epidemics is to take measures to bring such cases of diarrhœa under early treatment, and to employ such remedies as are of a corrective and astringent character. The College of Physicians has done good service in recommending that in any place visited with cholera house-to-house visitation should be instituted. In this way not only are cases of diarrhœa prevented from drifting, but opportunity is gained for seeing the homes in which they occur. The nature of the remedies to be used for diarrhœa will vary somewhat according to the nature of the case and the judgment of the practitioner. In some cases of gastro-intestinal catarrh, with little evacuation, such medicaments as bismuth and soda will be enough to correct the disorder, but where copious fluid evacuations from the intestine have begun they should be regarded as in themselves serious and first objects of treatment. No doubt there are cases of cholera, especially in the East, fatal without these, or in which the evacuations are disproportionate to the shock and collapse. But this is not the rule in this country, and indeed is exceptional. In the great majority of cases where the evacuations can be early controlled the constitution of the blood is preserved and the disease may be cured. Where there is not much vomiting, the chalk mixture with a few minims of tincture of opium will often suffice. In later epidemics, undoubtedly, the dilute sulphuric acid mixture has been rather preferred, especially where there is much sickness. More effective than either in many cases, and more easily retained in cases of sickness, is a small pill of solid opium and acetate of lead in the proportion of half a grain, to two, three, or even four grains of acetate of lead. The diet should be of a light and unirritating character; the patient should lie in bed, and have a large linseed-meal poultice applied to his abdomen; cold water should be freely allowed in quantities short of those which might excite vomiting; where that is not borne, ice is of great use.

When the stage of diarrhœa is passed, much more complicated changes and lesions have to be realised, and a wise treatment becomes increasingly difficult. It is not the least valuable part of Koch's investigations to have given more precise pathological definition to these changes, and to have shown us that, besides deadly collapse, with lividity, suppression of urine, pyrexia, etc., we have in a large majority of cases remarkably "severe intestinal lesions" to deal with—dark reddish brown color of the mucous membrane, with superficial hemorrhages, or the mucous membrane necrosed or covered with diphtheritic patches; the contents of the intestine being sanguinolent, ichorous and putrescent. Opium here is out of place. Stimulants, too, can only be used with great caution. Food must be of an unirritating character. Mr. Macnamara recommends warm enemata of beef tea with brandy every third hour in cases where the purging has abated. Food given by the mouth may be iced, and the powers of life must be husbanded by warmth and rest.

The difficulty in the treatment of the advanced stages of cholera will have two lessons for all sensible people:—First, that what is difficult for doctors must be much more so for those who are unlearned in disease; and, secondly, that their whole efforts should be directed to giving the profession every assistance in promoting the early treatment of cases, and diffusing general intelligence as to the laws which regulate the spread of the disease.—*Lancet.*

ON THE TREATMENT OF MEASLES.

By D. MACLEAN, M.D., Glas.,

Physician to the Glasgow Public Dispensary, Chest and Throat Clinique.

In the present prevalence of this disease it may not be out of place to call attention to a method of treatment which has been found, in my hands, of what might be called universal success. Considering that this disease is one that must be passed through by almost all members of the human family at some period of their existence, we may take it for granted that it is something essential that the human frame should undergo for the purpose of perfect health. Taking also for granted that it is the cause of cutting short many lives, it behoves us to take advantage of every means that can abbreviate the duration of the disease and diminish the mortality which so unhappily springs from it. We see every now and again in the journals and newspapers that an epidemic of measles has taken place in such and such a quarter, and that it was necessary to close the schools, etc. Nor is it only in our own country that we learn of so many deaths taking place, but we read of how its fearful ravages decimate whole populations, such as have recently taken place in Fiji. It thus seems essential that any form of treatment (for we cannot apparently prevent the onset)that can diminish the mortality must be of paramount importance whenever these epidemic or even sporadic cases appear. The form of treatment which I propose to lay before the members of our profession, and the remedies which I have been in the habit of using for a good many years, will enable them to try the same in their own practices, and ultimately refute or corroborate the conclusions I have long ago arrived at.

As this disease is considered one of the zymotic class, we have in its treatment to consider principally two things—(1) the management of the ferment, or whatever it is ; and (2) the management of the effects of this ferment upon the system. The most marked of these latter present themselves to us in the effects of the ailment upon the mucous membranes. The greatest action of the disease, as we all know, is upon the mucous membrane of the lungs, and it is from its action there we have the immediate cause of the ensuing death, or the prolonged ill-health afterwards. We have thus clearly set before us the line of action to follow:—(1) To relieve the congestion of the mucous membrane, which is the immediate cause of danger; and (2) to destroy or reduce the violence of the disease itself. This I have been in the habit of doing, I believe successfully, by giving (say to a child of two or three years of age) a teaspoonful in water of the following mixture every three hours:—Ipecacuanha wine, half a drachm; syrup of squills, half an ounce; quinine, two grains; acetate of ammonia solution two ounces. Of course the quinine is increased according to age. We have thus in this mixture a stimulating expectorant and diaphoretic to relieve the tension in the mucous membranes and the skin, and also in the quinine a specific to destroy or abate the violence of the primary ferment. It may be necessary to add to or modify the form in which this plan of treatment is carried out; as when the irritation and cough are persistently great, then the addition of a little tincture of hyoscyamus is all that is necessary. So with the quinine; sometimes the stomach is so irritable that it is necessary to omit it from the mixture; but as it is essential that it be introduced into the system for the destruction of the ferment it can be administered separately by giving it in powder, mixed with saccharated carbonate of iron, which diminishes the irritant action of the quinine that takes place when the drug is given alone.

This form of treatment for measles is good in all types of the disease, whether the attack be mild or severe, and more especially valuable when we have that dangerous form in which the eruption is of a deep-purplish color, a form which is generally recognized as being the most fatal. This style of treatment I have followed for a number of years. I have seen many cases, and, as a justification for submitting it to the notice of the profession, I do not remember having signed a certificate of death for either the disease itself or its effects.

THE CURE OF ASTHMA.

By RICHARD B. FAULKNER, M.D., PITTSBURG, PA.

From the *Medical Record*, 24, 1885:—I understand by the term asthma the condition of spasm of the bronchial tubes of both lungs, with hyperæmia approaching or amounting to inflammation, accompanied by râles upon both inspiration and expiration, with great difficulty of breathing. And the term is applied to the paroxysm alone, which returns at regular or irregular periods. Disturbance of function or disease of structure of the pneumogastric nerve is always present.

To cure the paroxysms I originated a method of treatment nearly five years ago, and repeated observation has confirmed its great utility. When called to a case of asthma, with a camel's-hair brush I make a streak of Churchill's iodine over each pneumogastric nerve, in its course in the neck, from the upper part of the thyroid cartilage to the upper borders of the clavicles. By counter-irritation thus applied, the capricious and abnormal exercise of nerve-force by the pulmonary filaments is controlled, and bronchial spasm promptly relinquished. Such is my original method—simple, certain, quick. Churchill's tincture is the best counter-irritant, because, first, it is convenient; second, its action is easily controlled; third, it does the work. To permanently cure the paroxysms, it is usually necessary to remove the underlying morbid condition upon which they depend or are associated.

SIMPLE INFLAMMATORY TONSILLITIS.

A modification of the guaiac treatment, which consists in the use, as a gargle, of a mixture known in the House Pharmacopœia of the Philadelphia Polyclinic as the gargarysma Guaiac Composita, is highly recommended in the treatment of this affection by Dr. J. Solis Cohen. Two fluid drachms each of the ammoniated tincture of guaiac and the compound tincture of cinchona are mixed with six fluid drachms of clarified honey, and shaken together until the sides of the containing vessel are well greased. A solution, consisting of eighty grains of chlorate of potassium in sufficient water to make four fluid ounces, is then gradually added, the shaking being continued.

Without due care in the preparation of this solution the resin will be precipitated. Gargle with this mixture freely and frequently, and at intervals of one-half to three hours. In some cases a saline cathartic is first administered. Should any of the guaiac mixture be swallowed it is considered rather beneficial than otherwise, and in some cases it is advised to swallow some of it. Relief is usually experienced in a few hours.

For some time past Henry G. Houston, M. D., (*Atlantic Journal of Medicine*) has been using eucalyptus in case of quinsy with very gratifying results. Dilute one ounce of the fluid extract with one drachm of warm water, and use as a gargle or spray every twenty minutes. The water must be as warm as the patient can bear it.

It has been his good fortune to see all the cases so treated recover speedily, without suppuration No other remedy was used, except in one instance, when he prescribed quinine.

He suggests that, owing to its antiseptic properties and its special action on the respiratory tract, eucalyptus would be an excellent local application in diphtheria, either used as above or to medicate vapor for inhalation.—*Medical Age, November* 26, 1883.

ADMINISTRATION OF QUININE.

The following summary gives the pith of notes on the administration of quinine contributed by David Young, of Rome, to the *London Practitioner :*

(1.) Never to give quinine in antipyretic doses in cases where the bowels are confined and the secretion of urine is scanty.

(2.) In cases where it is being administered and an increase of dose is desirable, this may be safely done if the skin, bowels and kidneys maintain their normal functional activity.

(3.) In many cases of remittent and intermittent fevers the combination of the drug with chloride of ammonium or a salt of potash or soda is likely to be more easily tolerated, as well as more useful, than if it be administered in a pure form.

(4.) During the administration of quinine, should a headache come on or increase in intensity, the case requires the most careful attention.—*Boston Med. and Surg. Journal Nov.* 8, 1883.

TREATMENT OF ECZEMA OF THE GENITALIA; PRURITUS AND LEUCORRHEA.

In cases of eczema, in which glyceroles and unguents have failed, the following formula has been successful :

Chlorate of potassium, ...30 grains.
Wine of opium,.....50 grains.
Pure water,..... 1 quart.

Applied to the parts by linen compresses covered with oiled silk. If there is much inflammation precede this with warm hip-baths and cataplasms sprinkled with powdered carbonate of lime. In obstinate pruritus, associated with leucorrhea, a tablespoonful of equal parts of tincture of iodine and iodide of potassium, in a quart of warm tar-water (tar-water holding the iodine in solution), used daily, night and morning, removes the pruritus and ameliorates the leucorrhea. In fetid leucorrhea, two or three tablespoonfuls (in a quart of warm water morning and evening, as an injection) of the following formula will be found useful :

Chlorate of potassium,.....13 parts.
Wine of opium,..... ..10 parts.
Tar-water,..... 300 parts.

Or,

White vinegar (or wine),.....300 parts.
Tinct. eucalyptus,..... 45 parts.
Acid. salicylic,..... 1 part.
Salicylate of sodium,..... 20 parts.

One to five teaspoonfuls in a quart of warm water, as an injection, two or three times a day —*Obstetric Gazette.*

HOW TO SHRINK HYPERTROPHIED TONSILS BY CAUSTIC APPLICATION.

Among the various caustics for local use in causing shrinkage of tonsillar hypertrophies, Dr. Chisholm (*Virginia Medical Monthly*) has found the chloride of zinc the most available and the least annoying to the patient. He employs it in the following manner : A wire, the size of a fine knitting-needle, is roughened for a half in from one end, so that it may hold a fibre of absorbent cotton twisted upon it. Dip this into a saturated solution of chloride of zinc, and thrust it to the very bottom of the crypt, and keep it there several seconds. When withdrawn the whitened orifice marks the cauterization. By renewing the cotton for each follicle, several may be thoroughly cauterized at the same sitting, without causing any annoying irritation to the throat. A very few applications will cause the gland to shrink, as will be seen one week after destructive cauterization has been made to the interior of the follicles.—*The Medical Record.*

TREATMENT OF FISTULA IN ANO.

Dr. Poingt claims *(Le Courrier Medical)* that any fistula amenable to treatment by the elastic ligature may be cured by simple drainage of the fistulous tract. The drainage-tube is inserted by means of a stylet passed up the tract from the external opening. At the end of two or three weeks the drainage-tube falls out, after having destroyed the superficial wall of the fistula. A granulating surface of small extent is left, which gradually heals by cicatrization. The procedure is wholly painless, and the patient may pursue his ordinary avocations during the entire course of treatment. The operation is never followed by any of those serious complications sometimes seen after the cutting operation. *Medical Record.*

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VOLUNTEER MILITARY MEDICAL OFFICERS.

The rebellion in the North West, necessitating the dispatching to the front of nearly five thousand of the Volunteer Militia of Canada, has rendered necessary the organization of a very considerable medical force, to attend to the relief of the sick and wounded. For this work a series of ambulance corps have been organised, and the number of medical men who have volunteered for this service has been very greatly in excess of those required. A number of dressers have been attached to these ambulance corps, being selected from advanced medical students, who have shown an equal enthusiasm in coming forward to take part in the noble work of relieving the medical necessities of our gallant Volunteers. All this medical organization is independent of the medical and surgical equipment of each corps which has taken the field—each of course having its Regimental Surgeon and Assistant Surgeon. We are pleased to notice that, with few exceptions, the Regimental Medical officers who appear in the Militia List have proceeded to the front. A Montreal Battalion, the 65th, we regret to say was, we believe, the first to make an exception to this rule. When this Battalion left our city it took with it two Surgeons who went as substitutes for the gazetted Regimental Surgeons. We believe one of these Regimental Surgeons had a reasonable excuse in the very delicate condition of his health, but we have not heard any reason assigned why the other did not obey the call of duty. Halifax next becomes notorious in this respect, the surgeon who declined to accompany his regiment being, it is said, presented with a considerable number of white feathers. Eventually so excited did the recreant medico become under the castigation of public opinion, that he assaulted in the public street a brother M.D., whom he believed to have been loud in denouncing his conduct. The ordering to the North-West of the Montreal Garrison Artillery has again brought our city disagreeably to the front in this respect. On the 11th of May this Battalion started, leaving behind both its medical officers, and taking with them substitutes for these gentlemen, in the persons of two gallant young medicos. This has given rise to a large amount of talk, which has not been of a character very complimentary to those who, in the hour of trial, failed to fulfil their duty, and has reflected unfavorably on the entire medical profession o Montreal. A volunteer medical officer, when he accepts her Majesty's commission, takes upon himself an obligation of a very responsible character. Of all the officers of a Volunteer regiment he is the one that could be most easily dispensed with so long as his corps is not in active service in the field or in camp. Even in the latter case, were it not that it gives him some slight insight into the duties he would have to perform in the field, his services might be dispensed with and the slight ailments of the men attended to by a local practitioner. But the Government places him on the strength of his regiment, pays him his annual drill money—not that he may attend balls and levees clothed in the Queen's uniform but that he may learn something of the interior economy of his department and familiarise himself with those duties which are peculiar to his position. All this is done so that

when his Regiment is called upon for service he may enter upon his work having some idea of its character. It is at this period that the medical officer of a corps becomes a useful appendage of their regiment. To fail to perform their duty at such a time, and to be replaced by perfectly green hands, is a very serious matter, and one which we think deserves, as it is receiving, all but universal condemnation. What right, we ask, has the surgeon of a corps to absent himself from his post at such a time as this? If the other officers must go, why not the surgeons? We trust we have seen the last of those evasions of duty on the part of Medical volunteer officers. If it is again attempted we trust those in authority will show that they understand their duty in such cases.

CHOLERA.

In March, 1866, pursuant to an order of the Governor-General in Council, the Minister of Agriculture convened a Medical Conference, to discuss the cholera question in all its bearings and report thereon. The Members of this Conference were: Dr. Macdonnell, Chairman; Dr. Taché, Secretary; Drs. Van Cortland, Hill, Landry, Dickson, Aikins, Beaubien, and Grant. Their report was so complete and exhaustive that it was printed by the Bureau of Agriculture in 1866, and reprinted in 1878. A very slight revision would bring it up to date. It is interesting to note that the appointment of Government Health Officers on board all vessels landing passengers at Quebec was suggested by the Conference as an important preventive measure. The following extract embodies their views:—

"The point at which a quarantine is of all importance, as proved by the constant experience of former epidemics, is on the St. Lawrence at the entrance of the port of Quebec. The Government possesses already, and very fortunately at that very point, an admirable establishment which only requires to be made at times of more than ordinary dangers adequate to the circumstances. A better selection for a quarantine than the Grosse Isle station cannot be made, situated as it is at some thirty odd miles from Quebec, on an island of about 600 acres superficies, with deep water and good anchorage, at least three miles distant from any parish or village, and yet sufficiently near to prompt and commodious public means of communication. There can be practised a reasonable sequestration, embracing on one side the relative security from infection which quarantine measures can afford, and on the other side, neither vexatious nor ruinous to commerce and international intercourse.

* * * * * There is, as connected with the quarantine, a question on which it is important that the public should possess some practical information, in order to prevent one-sided notions taking possession of the public mind, and thus becoming a subject of very serious embarrassment. This question may be thus written: what rules shall apply to steamers of passenger lines frequenting the ports of Quebec and Montreal, one of which is subsidized by our Government and carries our European weekly mail? It seems impossible to exempt them entirely from quarantine when coming from a country laboring under the scourge; but a strict quarantine for such ships may prove very disastrous even absolutely ruinous for the Company and calamitous for commerce in general. This simple expose of the question at once suggests that it is one of no small importance and one which is fraught with serious difficulties. Without any attempt to solve the question, it will not prove useless, it is hoped, to suggest a measure the adoption of which may result (if not always, at least in several instances) in the avoidance of the greatest danger on the one side, and of immense losses to the Company, passenger and merchants on the other. This measure is suggested by the practice for a long time adopted by the Austrian Government towards their company of steamers trading between Smyrna and Trieste. To follow this practice would require that a special Medical Health Officer is placed on board each steamer; it will then be, whether there is disease or not on board, assimilated to a quarantine station—this officer to be appointed by Government at the first warning of cholera, for a limited required time, besides the ordinary physicians of the ship. During the storage of the cargo, sanitary precautions would have to be enforced, and preventive disinfection practised in a way not to damage the goods.....Every day of the passage sanitary measures would have to be resorted to, according to the regulations made to that effect; and, amongst others, the goods and effects of the passengers in daily use would have to be ventilated on deck. In the case of five days having elapsed since the last attack of cholera on board, at the moment of arrival at Grosse Isle all those yet on sick and conval-

escent lists being landed, the ships, without further detention, would be permitted to proceed to Quebec, and, if free from cholera on her arrival at Quebec, be allowed to pratique; if not free from cholera, ordered to remain at anchor at the mouth of the St. Charles, to be dealt with according to the orders of the inspecting physician at the port, after consultation with the Quebec Board of Health. In the case of detention at Grosse Isle a shorter period, less stringent measures of purification to be adopted for these ships than with ordinary vessels. Even partial admission to pratique might be allowed them.

The recommendations of the Conference, though not as far reaching as we would like, are nevertheless a step in the right direction. If the quarantine arrangements at Grosse Isle are to succeed in preventing cholera from invading the country by way of the St. Lawrence, all ocean vessels carrying passengers from infected countries must be compelled to submit to one of two courses—either: 1. A fourteen-days quarantine when they arrive at Grosse Isle; or, 2. The presence of a Government Health Officer throughout the voyage, who, by co-operating with the Health Authorities on both sides of the ocean, will be able to keep the ship virtually in quarantine from the beginning of the voyage. At the present time, such a scheme is imperative in the interests of the country; in due time we hope to see the principle extended by the permanent organization of efficient Marine Medical Service under Government control for our passenger steamship lines.

SEI-I-KWAI.

That Japan has advanced in modern ideas and has taken her place as an active member of the community of nations is shown by the development of Medical Science as viewed by European and American methods of research. Among our exchanges is a monthly journal with the above title. Not understanding Chinese Hieroglyphics we are unable to furnish our readers with extracts of the proceedings of their Society. A supplement of eight pages in English is, however, appended. From the January number we gather that a society with the above name was founded in Tokia in 1881. Since then it has held 158 weekly meetings, conducted on the same plan as with our own medical societies. The society is contemplating the erection of a special building with Museum and Library. We append the following extracts:

THE TOKIO MEDICAL LIBRARY AND MUSEUM.

For many years past there has been felt in the Capital the growing necessity of a public library, in which might be found the principal foreign and native publications relating to medicine, and especially those written in the languages of the west. A medical library is no new thing in Japan, and there are several to day which contain foreign medical works; notably among which is that of the Medical Department of the Imperial University at Tokio, which, according to a recent report, contains puite a large number of foreign medical works, mostly in German. These libraries, however, are not readily accessible to all, and with the rapidly increasing extent of medical literature, in the East as well as in the West, some readily accessible means of information as to the progress of medicine should be had by those whose business it is to teach others, as well as by those who receive instruction. This need has hitherto, in a measure, been met by the half-score of medical periodicals published in Japanese, and by a few foreign journals having a limited circulation in this country. Yet both of these are inadequate to meet the need; the former, all devoted to Western medicine or allied sciences, and ably edited as they are, probably do not reach more than one-fifth of the practising physicians; while it is doubtful if the circulation of foreign medical journals in Japan exceeds two hundred copies. At the same time Western medicine is gaining a great and permanent hold, and within a few years the practice of Chinese medicine will undoubtedly be a thing of the past. There is, too, a growing tendency toward the more extensive use of foreign languages in the medical schools, German having been in use in the principal course of the Medical Department of the University for a number of years past, and the knowledge of at least one Western language is fast becoming a recognized necessity among physicians. Again, the translation of a sufficient number of foreign medical works into Japanese—and much has already been done in this direction—will take years to accomplish, and then the work may require revision on account of the, at present, unsettled state of Japanese terminology. Such being the case, the encouragement of the study of medicine in those languages in which the greater part of the literature of the subject is written, namely, German, French, Italian and English, will lessen the difficulties in the way of

the student and practitioner alike, and hasten the coming of the time when Japan may begin, in a measure, to repay the debt she owes to the Western world for the wealth of learning made available to her.

The object of the establishment of this library may therefore be stated as two-fold: to encourage the more extensive reading of Western medical works, and to endeavor to raise the standard of medical literature by furnishing sources of reference now only available to very few. It is also intended to collect for reference the works of the principal writers upon the Chinese system of medicine, as well as the writings of Japanese upon Western medicine. A museum will also be added in due course of time.

As to the management of the Library, it should be stated that it is under a committee of the members of the *Sei-I-Kwai*; and that it is intended, so soon as arrangements can be completed, to erect suitable fire-proof buildings; meanwhile the Library has been opened at No. 11 Yariya-cho, Kiyobashi-ku, Tokio, where books, pamphlets, etc., may be sent.

It is the purpose of the Society to notice in its Transactions in Japanese, all foreign books, and in the English Supplement all Japanese works purchased for, or donated to the Library.

GLYCERINE FOR DRYNESS OF TONGUE AND THIRST IN FEBRILE STATES.

From a foreign exchange we learn that Surgeon Major S. K. Cotter, in a recent number of the *Indian Medical Gazette*, relates the case of a patient suffering from enteric fever who was awakened every ten minutes by the dryness of his tongue, which was parched and covered with sordes. The tongue was painted with glycerine frequently, and the result was that at the first trial the patient slept almost comfortably, waking up about every two hours with the tongue feeling dry, but not really dry to the touch; after renewed application of the glycerine he at once slept again. In six other cases it has been tried and found satisfactory. Surgeon Major Cotter does not attempt to decide whether it acts by increasing secretion from the mucous membrane, dissolving the sordes, or making an artificial coating. But, in whatever way it acts, its benefit is vouched for when the tongue is parched during any disease.

ILLINOIS STATE BOARD OF HEALTH.

This Board has sent us a quarterly report of its proceedings for the period ending April, 1885. In a previous issue we drew attention to the advanced character of its work, which is far ahead of anything attempted by any other State or Province in America. Though this Province has done something for sanitation we fear that a long time will elapse before our legislators will become sufficiently enlightened or patriotic to establish a like system.

MELLIN'S FOOD FOR INFANTS AND INVALIDS.

A recent analysis by Mr. G. W. Wigner, the President of the Society of Public Analysts of England, throws considerable light, not only on the composition, but on the physiological action of this popular preparation. It appears that it contains nearly 87 per cent. of dextrine, maltose, etc., soluble in cold water.

As Mr. Wigner points out, it is not a mere starch or sugar food, but a soluble preparation, containing those nitrogenous and phosphatic principles which contribute largely to the growth of bone and tissue in young children. Being thoroughly malted, it is not only readily digestible itself but actually assists in the digestion of milk and other foods with which it is mixed. It must of necessity be of great value in the case of feeble infants who cannot digest ordinary starchy foods.

Mr. Wigner's analysis has evidently been performed with great care, and is of much interest.

LOCAL ANESTHETIC.

A mixture of two drachms each of chloral and camphor, half a drachm of sulphate of morphine, and one drachm of chloroform, makes a useful anesthetic paint for minor operations. It should be applied several times with a camel-hair brush and allowed to dry before the incision of the parts.

LOCAL AND GENERAL.

Typographical and other errors in the April number, furnish no explanation of the reason why Dr. Wanless should misconstrue the evident meaning of a paragraph in the February number. I assumed of course that my readers knew that in the United States a class of empirical healers exist who call themselves Christian Scientists. They do

not give remedies, but rely upon the "influence of the mind" over disease.

A much better educated class, several members of which I have known and respected highly, are those who rely upon so-called hygienic measures and are known as Hygienic Physicians. Now, I asked the question, which I repeat for Dr. Wanless' benefit, and he may answer it, if he can; I wonder what a Christian Scientist, M.D.—(or, for the matter of that, a Homœopathic or Hygienic M.D.) would do if called to attend a case of cholera morbus?

Probably he would be sent for at 2 a.m; when on arriving at the house he would be told that the patient had been vomiting and purging for several hours; that the cramps in the stomach, legs and arms were getting unbearable; that if nothing were done for him he could not live. Of course we all know there is very little chance of his dying, and that if he were left to fight it out he would finally recover, after being thoroughly exhausted, principally by the intense pain. Now, what shall be done and what course is best? Shall we trust to infinitesimal doses of arsenic? shall we solemnly warn him to beware of indigestible food in the future? shall we endeavor to try mental remedies only, or shall we take the magic hypodermic syringe and put half a grain of morphia and 1-100 grain of atropine "where it will do most good?"

I heartily join with the Doctor in his desire for truth for its own sake. He who will sincerely and respectfully state his views in my hearing or within the circle of my influence will command my respect, and I will think of him as a brother whatever *pathy* he owes allegiance to. Speaking for myself I consider that I am bound by no man's dictum, and I would accept to-morrow the teaching of any one whom my reason and experience show me to have the right on his side. It has been my pleasure to know many heretics in my time, and I have a leaning in their direction, but I cannot think it possible for anyone to read O. W. Holmes "Currents and Counter Currents in Medicine" and believe in Homœopathy as a scientific system of medicine.

I am opposed to much of what commonly passes for charity in our day; I would not do *everything* for the poor; I would rather try to help them to help themselves. Instead, therefore, of asking her rich neighbors to meet all the expenses of such an organization I would suggest that the recipient of the assistance be informed that she would be expected to contribute what she thought she could afford towards the wages of her nurse. I think that the amount, if any, to be paid might be fixed by the medical attendant, who would be likely to know something of the circumstances of his patient.

One of the best suggestions I have ever heard, and one which I would greatly like to see carried out in this city, has been made by Dr. John P. Gray of the Utica Institution for the Insane. He insists that for at least a month after her confinement a woman should be entirely free from toil, worry and anxiety, and that she should during that time at least have a generous and suitable diet. That these necessities, which are beyond the reach of most poor women, may be obtainable he advises the employment, by an association, of women of the same social class to do the housework and to be paid for it by this association. This is what he says in support of his views: "If women knew they would have all needed care, not in a hospital, with its necessary publicity and separation from home, but in their own homes and among their families, and without the notoriety of their condition, what a burden would be lifted, what health saved, and what instanity prevented."

The *Medical News*, referring to the subject, says:—"The conviction appears to be gaining ground that, in view of the great fatality of acute diffused peritonitis, and the futility of ordinary modes of treatment, laparotomy should be resorted to, thereby placing effusions into the peritoneal cavity on the same footing as pleural effusions. Its success in cases of peritonitis complicated by the presence of an ovarion tumor has long been established; and Mr. Lawson Tait states, in the *British Medical Journal* of March 21st, that he has opened the abdomen in not less than 44 cases on account of peritonitis, and that 41 recovered."

Small pox is slowly but surely spreading over this city, and it is to be hoped that Dr. Bessey

and the other public vaccinator will be able to vaccinate all those who require that prophylactic operation. At the same time I am still of the opinion that it would have been better to have retained the vaccinators previously appointed, as there will be work enough and to spare for all of them.

Of the propriety of Dr. Bessey's appointment there can be no doubt, but his time would have been more profitably expended in the propagation of reliable vaccine.

Dr. Wanless promises to tell me how he would treat a case of cholera morbus, and then immediately goes on to discuss the relative value of homœopathic and allopathic treatment of a very different disease, viz., Asiatic cholera. Now McLachlan's report, if it prove anything, simply goes to show that the allopathic treatment of true cholera, as he saw it, was worse than none at all, and I freely confess that I do not think, and have never thought, that it is or has been much better. In other words, Dr. Wanless, in their sincere desire to find a remedy for this dreadful disease certain medical men did more harm than those who, equally sincere, deluded themselves into thinking they were giving remedies but were not. I do not believe that any remedy has yet been discovered which exercises any appreciable effect upon true cholera.

L'Union Medicale for April has a common-sense editorial on the relief of the pains of labor. The writer refers to M. Doléris' experience with cocaine, where relief from the pain was marked in six out of eight cases. The remedy was applied directly to the uterine neck during dilatation. I should imagine that the great cost of the drug would be a serious drawback to its use in any large quantity.

I have always insisted that burning sulphur in the sick room, after infectious diseases, should only be employed as an adjunct to further disinfection. The germicide power of dry sulphurous oxide is low, and its action on many microbes is practically nil. I quote the following from the report prepared by the Chairman of the Committee on Disinfectants of the American Public Health Association :—" Fumigation with sulphurous acid gas alone, as commonly practised, cannot be relied upon for the disinfection of the sick room and its contents, including bedding, furniture, infected clothing, etc., as is popularly believed. To secure any results of value, it will be necessary to close the apartment to be disinfected as completely as possible, by stopping all apertures, and to burn not less than three pounds of sulphur for each 1,000 cubic feet of air space in the room." The report advises that the wood work in the room should, in addition, be thoroughly washed with a 1 to 1,000 solution of mercuric chloride, and then after 24 hours scrubbed with soap and hot water. The clothing should also be subjected to the action of disinfecting agents.

None of the regular surgeons attached to the two regiments ordered on active service from Montreal have gone to the North-West with their corps. It is a question whether it is desirable that medical men with large practice should be forced to leave it for several months, and yet the other alternative—resignation in the very face of duty—must appear to the public to be equally undesirable. I suppose, however, that every man must settle this question for himself.

As I stood by the bedside of a patient dying from an attack of suppurative peritonitis the thought occurred to me that such cases might furnish legitimate scope for the operation of laparotomy. Shortly afterwards I came across an account of Dr. Treves' recent address before the Royal Medical and Chirurgical Society, in which he reports the case of a woman whose abdominal cavity was successfully opened and freely irrigated with water and a drainage tube inserted, on account of diffuse peritonitis, the result of the bursting of a pelvic abscess. In the discussion which followed Bryant, Thornton, Powell and others commended the practice of Mr. Treves. Mr. Howard Marsh also read notes of the case of a young man, aged nineteen, who was suddenly seized with symptoms of acute peritonitis. An incision into the abdomen was followed by the discharge of two pints of fetid pus. The cavity was thoroughly washed out with a weak (1 to 60) solution of carbolic acid, a drainage tube was inserted, a solution of iodine (1 to 1000) was subsequently injected, and the patient recovered. I intend to employ similar treatment in the next suitable case I have.

P. A. LAVER, M.D.

Montreal, May 8th, 1885.

PERSONAL.

Dr. C. E. Nelson, of New York, and lately editor of the *Planet*, has become assistant editor of the *Eastern Medical Journal*, published in Worcester, Mass. We have had occasion to mention Dr. Nelson's name a good many times, and therefore it is unnecessary to add anything more at present. The name of Nelson is a prominent one in the Medical history of Montreal, and the representatives of the family abroad have not diminished its lustre. We wish him every success in his new office, and the Journal a long subscription list.

REVIEWS.

The International Encyclopedia of Surgery: A Systematic Treatise of the Theory and Practice of Surgery, by Authors of Various Nations. Edited by JOHN ASHURST, Jr., M.D., Professor of Clinical Surgery in the University of Pennsylvania. Illustrated with Chromo-Lithographs and wood cuts. In six volumes. New York: William Wood & Co.

Vols. III., IV. and V. These volumes are large and attractive, and in every way are worthy of the success to which this truly great work has already attained. The articles are contributed by writers of wide reputation, giving in many cases a complete summary of the subjects upon which they treat. When complete they will form a valuable surgical library, as the important subjects with which they deal have not been condensed within the narrow limits usually given to text-books.

Volume III. is devoted to injuries and diseases of various tissues of the human body, muscles, tendons and fascia, Lymphatics. Injuries of blood-vessels, discussing hemorrhage, vascular inflammations and gangrenes, resulting from traumatic lesions. This very extensive article is from the pen of Dr. John A. Liddel, late Surgeon of Bellevue Hospital, &c., and contains the sum and substance of the treatment of such injuries. Dr. John A. Wyeth contributes the article on Surgical Diseases of the Vascular System. That on Aneurism, by Richard Barwell, F.R.C.S., is also an exhaustive treatise of great practical value. Injuries and Diseases of Nerves is by M. Nicaise, of Paris. The concluding article in the volume is by Dr. Edmund Andrews, of Chicago, on Injuries of the Joints, include Dislocations, Sprains and Wounds of the Articulations.

Volume IV. opens with a long and carefully digested article upon Injuries of Bones by Dr. John H. Packard, of Philadelphia. The various forms of fractures and modes of treatment are thoroughly discussed. Dr. Barwell, of London, on Diseases of the Joints, gives the different forms of synovitis; joint diseases due to osteitis, to syphilis and nerve disease. Dr. Ashurst, the able editor of this work, contributes the article on Excision and Resections; Dr. Fenwick, who was expected to furnish this article, having appended a chapter on his own method of excising the knee-joint. Tumors, by Henry T. Butlin, F.R.C.S. Injuries of the Back by John A. Liddel, and Malformations of Diseases of the Spine, by Frederick Welles, F.R.C.S., concludes this volume.

Volume V. The fifth volume of this truly great work fully equals, if it does not exceed, in interest the preceding numbers. A large portion of this volume is occupied by special surgery. There are fourteen articles, half the contributions emanating from the pen of English surgeons, the remainder being American.

The present issue of this large work is occupied with the surgery of the head and its parts, of the neck, chest, breasts, and abdomen, including hernia. Dr. C. B. Nancrede writes on injuries of the head; Mr. F. Treves on malformations and diseases of the head; Dr. E. Williams on diseases and injuries of the eye; Dr. A. H. Buck on diseases and injuries of the ear; Dr. Geo. M. Mefferts on the nose and sinuses; Dr. A. C. Post on the surgery of the face, cheeks, and lips; Mr. Christopher Heath on the mouth, fauces, tongue, palate, and jaws; Dr. N. W. Kingsley on the teeth and adjacent parts; Dr. Geo. H. B. Macleod on the surgery of the neck; Dr. J. Solis-Cohen on the air-passages; Dr. E. H. Bennett on injuries of the chest; Mr. T. Annandale on injuries of the breast; Mr. Henry Morris on injuries and diseases of the abdomen; and Mr. John Wood, of King's College, London, on hernia.

The article on Diseases of the Abdomen is perhaps the most interesting and valuable, owing to recent advances in abdominal surgery. This subject covers nearly 300 pages. It is impossible, for want of space, to do justice to the monographs which comprise these volumes. One more volume will conclude the series, and there is now no doubt that this encyclopædia fully realizes the expectations that were formed of it. The Publish-

ers have done their part well, and the able supervision of the Editor has left nothing to be desired.

Modern Therapeutics of the Diseases of Children, with Observations on the Hygiene of Infancy. By JOSEPH F. EDWARDS, M.D. Philadelphia; D. G. Brinton, 1885.

This is the fourth of Dr. Brinton's "Modern Therapeutics" Series, and is a companion volume to Naphey's Surgical Therapeutics and Atkinson's Medical Therapeutics, which have already run through seven or eight editions. Culled chiefly from periodical literature and monographs, these books present in convenient form the treatments of representative men at home and abroad; being therefore almost encyclopædic in character, they are valuable as works of reference to those who have not access to a large library.

The Influence of Sea-Voyaging upon the Genito-Uterine Functions. By J. A. IRWIN, M.A., M.D., New York: Trow's Printing Co., 1885.

We have received from Dr. Irwin the advanced sheets of his essay read before the Co. Med. Society of New York at its last meeting. Coming most appropriately at the opening of the summer tourist season, it is well worth careful perusal. An ocean voyage is often prescribed empirically for the relief of tedious or obscure uterine troubles, with a sort of vague hope that change of scene and air may somehow prove beneficial; but the experiment is frequently unsuccessful, and the patient returns with symptoms unimproved, sometimes aggravated. Such disappointments could be easily avoided by carefully studying the therapeutic effects of sea-voyaging, and recommending it only in suitable cases.

While ship-surgeon on several first class passenger lines, a large number of female passengers have come under his care. That he has utilised his opportunities for observation, may be gathered from the fact that he has collected the records of 104 pregnancies, 11 parturitions, 3 miscarriages and 451 menstruations or missed periods among women whose functions were usually normal.

Though recognising physical and atmospheric influences, he nevertheless attributes the chief effects of a sea-voyage to the ship's motion. His theory of seasickness (*Kinetia*), first published in the *Lancet* in 1881, is well known and now pretty generally adopted. It may be summarized as follows:

"The ordinary form of seasickness, that is the form caused by the easy gyrations of a large ocean steamer is essentially *a disturbance of equilibration*.

The initial lesion takes place within the semicircular canals of the internal ear, where the endolymph and otoliths, following the irregular movements of the vessel convey to the sensorium erroneous impressions of the position of the head in space; this soon results in dizziness, which is followed in due course by nausea and vomiting; and even when later, as is usual in tedious cases other parts of the organisation become involved, a hyperæmia of the parts concerned in equilibration remains a main factor in the general syneresis of nervous and functional derangement. In fact for practical purposes, seasickness may be regarded as a mild, transitory, semiphysiological prototype of the noncochlear part of Ménière's disease."

He finds the effect of sea-voyaging upon the menstrual functions to be highly stimulating, resulting in disturbance of periodicity and duration, as well as increase in quantity and degree of discomfort. In pregnant women abortion and premature labor are apt to be induced; in the non-pregnant the symptoms most commonly noticed are dysmenorrhœa, menorrhagia, a premature recurrence of the flow, and a more or less erotic tendency.

As a therapeutic agent, Dr. Irwin ranks sea-voyaging as a potent *emmenagogue*, with well marked tonic, alterative and sedative effects. He recommends it especially in cases of chloro-anæmia, amenorrhœa with deficient tone, retarded sexual maturity, certain forms of leucorrhœa uterine asthenia and sterility, and "especially in those delicate gawky over-schooled girls, in whom abeyance of uterine function is often among the first warnings of approaching phthisis."

PAMPHLETS RECEIVED.

Disinfection and Disinfectants—Preliminary Report of the American Public Health Association.

Many Drugs; Few Remedies. Geo. T. Welch, M.D.

Eulogy on the Life and Character of Lumsford Pitts Yandill. By J. A. Octerlony, A.M., M.D.

Idiopathic Anæmia. By J. H. Musser, M.D.

Bulletin of the Natural History Society of New Brunswick.

THE CANADA MEDICAL RECORD.

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Original Communications.

A CASE OF PARTIAL EPILEPSY.

By L. D. MIGNAULT, A.B., M.D., C.M., Professor of Anatomy University of Victoria, etc., etc.

(Read before the Medico-Chirurgical Society of Montreal).

The occurrence of cases of transient or partial epilepsy are by no means rare, and, though less striking and so to speak, impressive than the convulsive forms, are still worthy of study, and from the mildness of the morbid process seems much easier to arrest, and perhaps cure, than the former variety.

The multiplicity of manifestations of this disease may often mask its presence and, as in the case here cited, may almost be overlooked by the patient himself.

On the 12th of last February I was summoned to see M. H., æt. 40.

He occupied a private ward in the Hotel Dieu, and came to be treated for what is called biliousness. I gave him the usual treatment, a purge, and subsequent doses of nitro-muriatic acid,and the patient left the hospital, apparently feeling much relieved, and returned to his home in Boston.

About the 25th of the same month patient returned, and complained of renewed attacks of biliousness.

The patient a few days afterwards mentioned incidentally that he suffered from occasional attacks of vertigo and fatigue. It was only some days later that he described, after several questions, the nature of these vertiginous attacks.

The seizures occurred as follows:—On a sudden, without preliminary warning, he would lose consciousness, and, being possessed of a fixed idea, would set to work to execute it mechanically. He generally fancied that it was necessary for him to go to bed. Accordingly he would seek some room where he knew a bed was situated, and would undress and get into it. As often happened, being a teacher in an orphan asylum, he would manage to crowd himself into a child's cot and would, to his intense disgust,suddenly resume consciousness and find himself cramped and stiff from the exertion.

On another occasion, while waiting for a train at a railway station, he started off to walk along the track. As he crossed a bridge stepping from sleeper to sleeper, he was loudly shouted at by several persons, but he was still unconscious, and pursued his way for about four miles when he was both astonished and amazed to find that he had wandered so far away from his destination. This feat was all the more remarkable from the fact that my patient was very lame from hip disease in childhood, and wore a boot with a cork sole which replaced the shortening of the diseased leg.

He states that the duration of these fits is from a few minutes to an hour, and that they generally occur in the day time and very irregularly. He only has had them since the last two years, and they occur simultaneously with disordered digestion and torpid liver. No premonitory symptoms ever occurred. From the statements of eye-witnesses the patient at these times becomes very pale, the eyes are wide open and have a fixed expression. He answers quietly and reasonably any question which may be addressed to him, and will often even apologize for the trouble he is giving. The

patient, who is an intelligent and serious man, avers that he has not the slightest consciousness of what occurs.

Upon questioning patient as to his history he states that at 18, while a student at college, he suffered from epileptic seizures of the convulsive form, and that they disappeared after two years of treatment. They did not interfere with his general health ; and he attributed them to fatigue after severe study. Patient belongs to a healthy family, and there is no trace of any neurotic disposition.

The pathology of epilepsy came to my aid in the diagnosis of this case.

Assuming, with modern authority, that epilepsy is the result of sudden and acute anemia of the cortex, with congestion of the medulla, we may presume that in this case there is simply acute anemia of the cortex, without notable congestion of the bulb.

As it is probable that the conscious centres are located in the cortex, and moreover that all mandates of the mind are communicated to these convolutions, it is easy to explain the absence of conscious control,and the occurrence of mechanical actions. The cortex—the bond of union between mind and matter,so to say—paralysed,and the great ganglia in perfect condition, the movements are simply like the reflex spinal movements, and are called on in precisely the same manner. The diagnosis of this case seemed at first rather difficult, and I was at first inclined to believe it a case of *catalepsy*. The absence of rigidity however, and the history of the patient led me to class it among those cases termed *partial epilepsy*, and in a late number of the New York *Medical Abstract* several such cases are cited, and thus named.

The treatment employed ultimately was based upon my pathological ideas, and then alone was it successful.

I tried at first the anti-epileptic mixture of Brown-Sequard for two weeks, and the attacks were of frequent occurrence.

I then thought of treating the cerebral anemia, and gave the patient ½ gr. nitro-glycerine thrice daily. I followed in this the idea of Hammond of New York.

The results were excellent. The fits ceased, and patient passed 3 weeks without a single seizure. At the end of that time he noticed a copious deposit of lithates in the urine, with a diminution of that secretion, and the following day two seizures occurred ; both were very brief in their duration. I prescribed a mixture of pot. bicarb, and all went on well as before.

The patient left shortly afterward for Boston. At last accounts he was still well, and whenever the urine became loaded he had recourse to the potash mixture, and so the fits were averted.

ATMOSPHERIC MATERIES MORBIS.

By HENRY HOWARD, M.D.,
Consulting Physician and Government Visiting Physician to the Longue Point Asylum.

(Read before the Medico-Chirurgical Society of Montreal.)

GENTLEMEN—We don't know, and perhaps we never will know, what were the characteristics of primordial matter, whether if atoms or molecules or both atoms and molecules.

But this, physical science teaches us that matter, as it now is, is one, only differing in degrees, and that it is indestructible ; that mineral matter furnishes the material for the vegetable matter ; and that the vegetable furnishes the material for the animal. This evolution of matter shows how it is that all matter is one, only differing in degree, both structurely and chemically, and as it differs in degree so must it necessarily differ in its various phenomenon or forces or functions.

Mineral matter in itself differs in degree, structurally and chemically, and the same can be affirmed of all vegetable and animal matter ; and it is because of its phenomenon that we judge of the different degrees of matter, and that we place the nervous system of man as the highest degree of matter because of its phenomena, mind and consciousness, which we find to be of a higher degree than is mind and consciousness in any other animal.

We find, then, that physical science teaches us, that all the different degrees of matter have their own peculiar structure, consequently, that each has its own peculiar phenomenon or force or function, such as psychic, motor, and sensorial phenomenon.

Under the foregoing circumstances let us consider what do we mean by the term atmospheric materies morbis. Do we mean that there is matter floating in the air, either mineral, vegetable, or animal, which is of itself a morbid or destructive matter, when coming in contact with either animal or vegetable organisms, or with both animal and

vegetable organisms. There is no physical proof that such would be the true definition of the atmospheric materies morbis.

Is it the phenomenon, or force, or function, of this floating atmospheric matter, to whose morbid effects we attribute the results we consider to be due to an atmospheric materies morbis? It is impossible, for if such were the case no living organism, be it animal or vegetable, could exist surrounded with such destructive forces. I cannot conceive, nor do I see any proof, that there is any such thing as an atmospheric materies morbis till one is generated.

That great physical scientist, Professor Tyndall demonstrated by the most conclusive experimentts that the atmosphere was filled with floating matter, which, under favorable circumstances, when it came in contact with other matter, generated or, produced a very low living animal organism. He also proved that another of its phenomenon was to transmit or conduct rays of sunlight to illuminate our planet; and,again, that this atmospheric matter could be burned by flame,—all these facts Tyndall established by experiments. But he did not demonstrate the physical characteristics of this matter as to whether it was mineral, vegetable or animal matter, or a combination of all three.

Now, as I have already said, it is an established physical fact, that under certain circumstances in the natural order, mineral matter furnishes the material for vegetable matter, and vegetable matter furnishes the material for animal matter,—it therefore follows, from Tyndall's experiments, that this matter in the atmosphere must be vegetable matter, which, under favorable circumstances, causes decomposition of matter, of generates or produces living animal organisms, which may, or may not be, according to circumstances, a materies morbis, a germ of disease, and afterwards become an *atmospheric* materies morbis.

This is in accord with the well-established physical law of latent forces in matter, the existence of which we are frequently ignorant of till two forces come in contact with each other, and we have an explosion; it may be dynamite, it may be a fit of epilepsy, it may be an attack of mania, it may be a chick from an egg, or it may be a germ, a materies morbis, that, before its forces were exhausted, would slay its tens of thousands. but, fortunately, in time these forces are exhausted. If I am logically correct in my physics, it follows that the atmosphere, of itself, is innocent of generating a materies morbis, but that it contains matter which,when coming in contact with suitable soil,—the two forces meeting—result in a low living organism, which may or may not be a materies morbis, a germ of disease. What the characteristics of this germ will be must depend upon the nidus, which is the recipient of the atmospheric matter It is only thus can we account for the different forms of germs, those of phthisis, of typhoid fever, of cholera, of yellow fever, pneumonia and septicæmia.

Now, I do not deny the fact that any germ once formed may not be carried from one locality to the other by means of atmospheric air, as well as by any other mechanical means, such as the hands water, or clothing; but I do maintain that there is no physical evidence that atmospheric matter, or any other matter, can of itself generate a living organism—in other words, that there is no spontaneous generation.

It may be asked, why, then, use the spray or any other antiseptic treatment in surgical operations? I reply that an open wound, caused by a surgical operation on animal structure, appears to be a most suitable nidus for the atmospheric matter to come in contact with, to produce the germ of septicæmia,and the carbolic spray or other antiseptic, which has proved so successful in operative surgery, probably so changes the phenomena or function of the atmospheric matter, as to prevent the generation of the septic germ; moreover, no surgeon can be sure that there may not be septic germs in the locality in which he is operating. Under any circumstances antiseptic precautions can do no harm.

Here it appears to me that the question naturally suggest itself, how so many persons fall victims to these germanic diseases, typhoid fever, cholera, and while so many living in the same surroundings escape from these maladies.

It certainly must be due to the fact that the organs or tissues, with their functions, of the victims, must be in an abnormal state before being the recipient of the atmospheric matter, and in which a nidus is prepared, that evolves the germ and that those that escape do so because they possess normal organs, tissues, and consequently normal functions, whose forces will destroy a living germ coming in contact with them, and under no circumstances will such organs of tissues form a nidus for atmospheric matter or

generate a germ. Germs are not generated in living healthy organs or tissues.

I see no reason to doubt but that the germ theory has passed from a theory to a scientific fact, but I believe that the genesis of germs is, as I have explained, dependent as much on the nidus as upon the atmospheric matter; it is the two latent forces coming together that creates the germ, and upon the nidus depends the characteristics of the germ; moreover from the reasons already given I consider no germ nidus can exist in normal animal or vegetable matter.

Which of us have entered upon this world's stage of existence with normal organs and tissues and, if any, have we so lived in accord with nature's laws, as to maintain, cultivate and develop those organs? If there be any, then, of such I consider them proof against all germ diseases. These are they who live in plague-stricken cities without danger of disease.

To guard against epidemics by means of quarantine and cleanliness is perfectly in accord with nature's laws, and neither would require to be enforced if all persons were properly educated in these laws. But what use of such precaution, if, in our greed for riches, we, hour by hour, and day by day, exhaust our nerve forces by over-work and anxiety. Not entering upon the field of labor, as all men should, to be in accordance with nature's laws, to struggle for existence, but to struggle for riches, affluence and power, and for the gratification of our abnormal selfish desires. Under such pressure it is no wonder that our vital or nervous system, breaks down, and we become fitted to be the victims to the first epidemic, to the first materies morbis that enters our system, either by means of digestive or respiratory organs.

Will quarantine and cleanliness alone save the worn-out and exhausted laborer, servant, tradesman, merchant, or professional man, all of whom are slaves to labor, and taking but little rest to recuperate their lost physical forces. Will it save the over-worked teacher and school children who are starving for air and exercise? What will it do for those whose very pleasures are of most exhausting nature, robbing themselves of the proper time to recuperate their lost forces, rushing half mad through the ball room when they should be enjoying "Tired nature's sweet restorer, balmy sleep—" these poor slaves of a false social system who have not the moral courage to live in accordance with nature's laws? And what will it do for the unfortunate inebriate?

I say quarantine and cleanliness alone will not save these people. Nature tired of their unreasonableness, will do in the future as she has done in the past, slay these people with her epidemics; she will not be mocked, the people must choose between nature's laws or sickness and death, or, worse still, folly and crime.

Within the past year there has been very much writing and great discussions on the subject of cholera, but, like all other medical subjects, with very few exceptions, it appears to me that medical men on these subjects, base all their reasoning upon false premises; the old empirical school seems to me to have the same sway now that it had half a century ago, when I first entered the profession, and it rather surprises me to see so very few of the young men of the present day, that make medical philosophy the basis of their medical reasoning; however, I suppose there are none now but admit that there is a cholera germ, a tonic germ, that may be generated in the manner I have explained, in certain animal organs or tissues, which, when generated, becomes a materies morbis, that may be taken into the system either by the respiratory or digestive organs. But what has never been proven, at least to my satisfaction is, as to the locality or tissues that forms the nidus for the atmospheric matter, which, with the nidus, produces the germ; or, the germ already existing, where becomes its nidus after it has been received into the system. There is no secret about the nidus of the germ of typhoid fever; not so with the nidus of the cholera germ: because of the diarrhœa, it has been assumed that it is in the alimentary canal, but do the symptoms justify such a conclusion? I know of no dying where the symptoms so much resemble the dying from cholera as those presented by a person dying from the loss of blood, there is the greatest analogy in both cases, and why but that in reality the person dying from cholera does die from loss of blood,—that is to say, the whole serum of the blood is poured out through the coats of the arteries, and ejected by means of the viscera, leaving only in the vessels the red globules, which being deprived of the serum, soon coagulates, arresting the heart's action and resulting in death.

Now what must have taken place before the serum of the blood is separated from its red globules, evidently it must be preceded by par-

alysis of the vaso-motor nerves, causing paralysis of the vascular muscular fibres, particularly of the constricting fibres; then the vessels becoming relaxed the serum of the blood, being the most fluid, is poured out, while the red globules coagulate. So it appears to me that the action of the toxic germ of cholera is to cause paralysis of the vaso-motor nerves, and all the other symptoms of cholera are the result of that cause. Now all this does not prove that the nidus of the cholera germ may not be in some part of the alimentary canal, and the vaso-moter nerves be paralysed from the poison from that source, but I think it more probable, although I have no positive proof to offer, that the nidus be in some part of the great vaso-moter centre, the great sympathetic nerve or its ganglions. This is a question, however, that must for the present lie in abeyance, my object is to try and establish as a fact that the action of the toxic germ of cholera is to produce paralysis of the vaso-motor nerves, and, consequently, that the treatment must tend towards restoring those nerves to their normal states.

Dropsy, from heart disease, seems to me to bear some analogy to cholera: it is caused by serum being poured out, as in cholera, from the blood vessels, and in its last stage death is generally preceded by serous diarrhœa. May it not be probable that here also we have paralysis of the vaso-motor nerves, and, as digitalis has proved such a potent remedy in dropsy, might it not prove equally efficacious in cholera. Dr. Stewart, in his very scientific lecture on digitalis points out its valuable therapeutical effects upon dropsical effusion and in arresting serous diarrhœa, I presume by giving tone to the vaso-motor nerves. He says: "The action of the digitalis on the circulation in full medicinal doses may be summarized as follows:—

1. It makes the ventricles beat more powerfully.
2. It makes them beat slower.
3. It contracts the arterioles.
4. It raises the blood pressure."

Here we have physical phenomena produced by digitalis, the very opposite or antagonistic to the phenomena produced by the toxic germ of cholera, therefore it should be a remedy for that disease. But the question arises, would the digitalis produce these therapeutical effects where the case was cholera poisoning?

I don't know! From the well known action of ergot upon the vaso-motor centres and their pirepheræ, we would naturally look to it as a remedial agent in cholera, and electro-therapeutic treatment in the hands of an experienced electrician appears to me worthy of consideration. In fact any treatment that would be likely to restore the paralysed vaso-motor nerves to their pristine state of constricting vaso-muscular fibres should prove the best remedy for the treatment of cholera.

My chief object in bringing this short paper before the Society, was as an effort to stimulate discussions on medical subjects, from a physical stand-point. Medical empiricism has had a long reign, it must now give way to medical philosophy, the basis of which is physical science, or experimental philosophy.

Society Proceedings.

MEDICO-CHIRURGICAL SOCIETY OF MONTREAL.

Stated Meeting, Feb 6th, 1885.

T. G. RODDICK, M.D., President, in the Chair.

Sarcomatous Disease of the Femur and Acetabulum.—Dr. RODDICK exhibited the specimen and related the case. The patient, a young man, sprained his hip five years ago by falling through a trap in a hayloft. He appeared to recover completely, but in a few months became lame, and had pain, at times getting better. A year ago he had to take to crutches. Last June Dr. R. found roughness of the bones of the joint, and indistinct fluctuation in Scarpa's space. Nothing was done at that time. He was sent to the country, where he remained for two months, returning to hospital last October. The abscess was now opened.

He had hectic fever and lost flesh. He went away, but returned again in January, with suppuration about the joint. Becoming worse, it was decided to amputate at the hip-joint, which was done. There was no hemorrhage of any consequence, but the patient never rallied, and died twelve hours later.

Dr. SUTHERLAND exhibited the following specimens:—

1 *A Gall-bladder containing thirty-two stones.* This was removed from a subject (female) in the dissecting-room of Mc Gill College. Three or four of the stones were very large, measuring an inch square.

2. *Bladder and Kidneys of a man* from whom,

the student and practitioner alike, and hasten the coming of the time when Japan may begin, in a measure, to repay the debt she owes to the Western world for the wealth of learning made available to her.

The object of the establishment of this library may therefore be stated as two-fold: to encourage the more extensive reading of Western medical works, and to endeavor to raise the standard of medical literature by furnishing sources of reference now only available to very few. It is also intended to collect for reference the works of the principal writers upon the Chinese system of medicine, as well as the writings of Japanese upon Western medicine. A museum will also be added in due course of time.

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GLYCERINE FOR DRYNESS OF TONGUE AND THIRST IN FEBRILE STATES.

From a foreign exchange we learn that Surgeon Major S. K. Cotter, in a recent number of the *Indian Medical Gazette*, relates the case of a patient suffering from enteric fever who was awakened every ten minutes by the dryness of his tongue, which was parched and covered with sordes. The tongue was painted with glycerine frequently, and the result was that at the first trial the patient slept almost comfortably, waking up about every two hours with the tongue feeling dry, but not really dry to the touch; after renewed application of the glycerine he at once slept again. In six other cases it has been tried and found satisfactory. Surgeon Major Cotter does not attempt to decide whether it acts by increasing secretion from the mucous membrane, dissolving the sordes, or making an artificial coating. But, in whatever way it acts, its benefit is vouched for when the tongue is parched during any disease.

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MELLIN'S FOOD FOR INFANTS AND INVALIDS.

A recent analysis by Mr. G. W. Wigner, the President of the Society of Public Analysts of England, throws considerable light, not only on the composition, but on the physiological action of this popular preparation. It appears that it contains nearly 87 per cent. of dextrine, maltose, etc., soluble in cold water.

As Mr. Wigner points out, it is not a mere starch or sugar food, but a soluble preparation, containing those nitrogenous and phosphatic principles which contribute largely to the growth of bone and tissue in young children. Being thoroughly malted, it is not only readily digestible itself but actually assists in the digestion of milk and other foods with which it is mixed. It must of necessity be of great value in the case of feeble infants who cannot digest ordinary starchy foods.

Mr. Wigner's analysis has evidently been performed with great care, and is of much interest.

LOCAL ANESTHETIC.

A mixture of two drachms each of chloral and camphor, half a drachm of sulphate of morphine, and one drachm of chloroform, makes a useful anesthetic paint for minor operations. It should be applied several times with a camel-hair brush and allowed to dry before the incision of the parts.

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Probably he would be sent for at 2 a.m; when on arriving at the house he would be told that the patient had been vomiting and purging for several hours; that the cramps in the stomach, legs and arms were getting unbearable; that if nothing were done for him he could not live. Of course we all know there is very little chance of his dying, and that if he were left to fight it out he would finally recover, after being thoroughly exhausted, principally by the intense pain. Now, what shall be done and what course is best? Shall we trust to infinitesimal doses of arsenic? shall we solemnly warn him to beware of indigestible food in the future? shall we endeavor to try mental remedies only, or shall we take the magic hypodermic syringe and put half a grain of morphia and 1-100 grain of atropine "where it will do most good?"

I heartily join with the Doctor in his desire for truth for its own sake. He who will sincerely and respectfully state his views in my hearing or within the circle of my influence will command my respect, and I will think of him as a brother whatever *pathy* he owes allegiance to. Speaking for myself I consider that I am bound by no man's dictum, and I would accept to-morrow the teaching of any one whom my reason and experience show me to have the right on his side. It has been my pleasure to know many heretics in my time, and I have a leaning in their direction, but I cannot think it possible for anyone to read O. W. Holmes "Currents and Counter Currents in Medicine" and believe in Homœopathy as a scientific system of medicine.

I am opposed to much of what commonly passes for charity in our day; I would not do *everything* for the poor; I would rather try to help them to help themselves. Instead, therefore, of asking her rich neighbors to meet all the expenses of such an organization I would suggest that the recipient of the assistance be informed that she would be expected to contribute what she thought she could afford towards the wages of her nurse. I think that the amount, if any, to be paid might be fixed by the medical attendant, who would be likely to know something of the circumstances of his patient.

One of the best suggestions I have ever heard, and one which I would greatly like to see carried out in this city, has been made by Dr. John P. Gray of the Utica Institution for the Insane. He insists that for at least a month after her confinement a woman should be entirely free from toil, worry and anxiety, and that she should during that time at least have a generous and suitable diet. That these necessities, which are beyond the reach of most poor women, may be obtainable he advises the employment, by an association, of women of the same social class to do the housework and to be paid for it by this association. This is what he says in support of his views: "If women knew they would have all needed care, not in a hospital, with its necessary publicity and separation from home, but in their own homes and among their families, and without the notoriety of their condition, what a burden would be lifted, what health saved, and what instanity prevented."

The *Medical News*, referring to the subject, says:—"The conviction appears to be gaining ground that, in view of the great fatality of acute diffused peritonitis, and the futility of ordinary modes of treatment, laparotomy should be resorted to, thereby placing effusions into the peritoneal cavity on the same footing as pleural effusions. Its success in cases of peritonitis complicated by the presence of an ovarion tumor has long been established; and Mr. Lawson Tait states, in the *British Medical Journal* of March 21st, that he has opened the abdomen in not less than 44 cases on account of peritonitis, and that 41 recovered."

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ILLINOIS STATE BOARD OF HEALTH.

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MELLIN'S FOOD FOR INFANTS AND INVALIDS.

A recent analysis by Mr. G. W. Wigner, the President of the Society of Public Analysts of England, throws considerable light, not only on the composition, but on the physiological action of this popular preparation. It appears that it contains nearly 87 per cent. of dextrine, maltose, etc., soluble in cold water.

As Mr. Wigner points out, it is not a mere starch or sugar food, but a soluble preparation, containing those nitrogenous and phosphatic principles which contribute largely to the growth of bone and tissue in young children. Being thoroughly malted, it is not only readily digestible itself but actually assists in the digestion of milk and other foods with which it is mixed. It must of necessity be of great value in the case of feeble infants who cannot digest ordinary starchy foods.

Mr. Wigner's analysis has evidently been performed with great care, and is of much interest.

LOCAL ANESTHETIC.

A mixture of two drachms each of chloral and camphor, half a drachm of sulphate of morphine, and one drachm of chloroform, makes a useful anesthetic paint for minor operations. It should be applied several times with a camel-hair brush and allowed to dry before the incision of the parts.

LOCAL AND GENERAL.

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not give remedies, but rely upon the "influence of the mind" over disease.

A much better educated class, several members of which I have known and respected highly, are those who rely upon so-called hygienic measures and are known as Hygienic Physicians. Now, I asked the question, which I repeat for Dr. Wanless' benefit, and he may answer it, if he can; I wonder what a Christian Scientist, M.D.—(or, for the matter of that, a Homœopathic or Hygienic M.D.) would do if called to attend a case of cholera morbus?

Probably he would be sent for at 2 a.m; when on arriving at the house he would be told that the patient had been vomiting and purging for several hours; that the cramps in the stomach, legs and arms were getting unbearable; that if nothing were done for him he could not live. Of course we all know there is very little chance of his dying, and that if he were left to fight it out he would finally recover, after being thoroughly exhausted, principally by the intense pain. Now, what shall be done and what course is best? Shall we trust to infinitesimal doses of arsenic? shall we solemnly warn him to beware of indigestible food in the future? shall we endeavor to try mental remedies only, or shall we take the magic hypodermic syringe and put half a grain of morphia and 1-100 grain of atropine "where it will do most good?"

I heartily join with the Doctor in his desire for truth for its own sake. He who will sincerely and respectfully state his views in my hearing or within the circle of my influence will command my respect, and I will think of him as a brother whatever *pathy* he owes allegiance to. Speaking for myself I consider that I am bound by no man's dictum, and I would accept to-morrow the teaching of any one whom my reason and experience show me to have the right on his side. It has been my pleasure to know many heretics in my time, and I have a leaning in their direction, but I cannot think it possible for anyone to read O. W. Holmes "Currents and Counter Currents in Medicine" and believe in Homœopathy as a scientific system of medicine.

I am opposed to much of what commonly passes for charity in our day; I would not do *everything* for the poor; I would rather try to help them to help themselves. Instead, therefore, of asking her rich neighbors to meet all the expenses of such an organization I would suggest that the recipient of the assistance be informed that she would be expected to contribute what she thought she could afford towards the wages of her nurse. I think that the amount, if any, to be paid might be fixed by the medical attendant, who would be likely to know something of the circumstances of his patient.

One of the best suggestions I have ever heard, and one which I would greatly like to see carried out in this city, has been made by Dr. John P. Gray of the Utica Institution for the Insane. He insists that for at least a month after her confinement a woman should be entirely free from toil, worry and anxiety, and that she should during that time at least have a generous and suitable diet. That these necessities, which are beyond the reach of most poor women, may be obtainable he advises the employment, by an association, of women of the same social class to do the housework and to be paid for it by this association. This is what he says in support of his views: "If women knew they would have all needed care, not in a hospital, with its necessary publicity and separation from home, but in their own homes and among their families, and without the notoriety of their condition, what a burden would be lifted, what health saved, and what instanity prevented."

The *Medical News*, referring to the subject, says:—"The conviction appears to be gaining ground that, in view of the great fatality of acute diffused peritonitis, and the futility of ordinary modes of treatment, laparotomy should be resorted to, thereby placing effusions into the peritoneal cavity on the same footing as pleural effusions. Its success in cases of peritonitis complicated by the presence of an ovarion tumor has long been established; and Mr. Lawson Tait states, in the *British Medical Journal* of March 21st, that he has opened the abdomen in not less than 44 cases on account of peritonitis, and that 41 recovered."

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the student and practitioner alike, and hasten the coming of the time when Japan may begin, in a measure, to repay the debt she owes to the Western world for the wealth of learning made available to her.

The object of the establishment of this library may therefore be stated as two-fold: to encourage the more extensive reading of Western medical works, and to endeavor to raise the standard of medical literature by furnishing sources of reference now only available to very few. It is also intended to collect for reference the works of the principal writers upon the Chinese system of medicine, as well as the writings of Japanese upon Western medicine. A museum will also be added in due course of time.

As to the management of the Library, it should be stated that it is under a committee of the members of the *Sei-I-Kwai*; and that it is intended, so soon as arrangements can be completed, to erect suitable fire-proof buildings; meanwhile the Library has been opened at No. 11 Yariya-cho, Kiyobashi-ku, Tokio, where books, pamphlets, etc., may be sent.

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Absence of the patellar reflex, Dr. Stewart remarked, is looked upon as one of the most important and earlier symptoms of the disease. A few cases have been recorded where it has not been absent, but up to the present time he had not read of any case where it was exaggerated. On theoretical grounds it had been suspected that preceeding the stage of loss of patellar reflex in tabes, there is a period when it is exaggerated. Even were this supposition true, it would not aid us any in this case, for it is one of considerable standing, although still in the pre-ataxic stage.

The increased inflexes cannot be explained by disease of the lateral column, for there is an entire absence of any increased turicity, this symptom being next to the exaggerated reflexes the most trustworthy evidence of a sclerosing of the pyramidal strands.

Dr. Stewart concluded by stating that the honour of having made the diagnosis was Dr. Buller's, and it was owing to Dr. Buller's kindness that he was enabled to present him to the Society.

Dr. Hy. Howard said that the expectation of mental symptoms depended on whether the lesion begins, high or low in the cerebro-spinal system for in ascending lesion death takes place before any dementia occurs.

Hence the important point is to know what centres are affected, and whether these be above or below the reflex centres usually implicated in Tabes.

Here it is interesting that the cortical substance having been involved some years, there is yet no impairment of mental powers.

Dr. Campbell said that owing to the better knowledge in general, and especially of opathalmoscopic signs, cases of this disease were now detected, which formerly escaped diagnosis; but he did not believe such cases occurred with greater frequency to-day. He spoke of a case (which had been seen in consultation) by Dr. Trenholme in which a woman evidenced exaggerated sexual desire; subsequently become insane.

In answer to Dr. Trenholme, Dr. Stewart said, death was often due to exhaustion from the pains,

Dr. H. Howard said that Pneumonia was sometimes a cause of death due to implication of pulmonary trophic centres and respiratory tract.

In answer to questions as to treatment, Dr. Stewart said that though there was little evidence of syphlis, he had put his patient on anti-syphilitic treatment. Electricity is useful to control the pains.

The flatulence was thought part of the disease due to paresis of intestinal muscleis.

Some discussion as to use of ergot in Tabes followed and Sequin and Althans were quoted in support of its use. Dr. Stewart said that it was perhaps dangerous as Ergotism caused an apparently genuine Tabes.

In reply to questions as to Etiology, Dr. Stewart said symptoms (especially eye symptoms) no doubt preceded injury and beat referred to.

Dr. Reed called attention to disturbances in function of urination as early symptoms in Tabes.

Dr. Reed, spoke of 2nd attacks of measles in same patient, and spoke of two such recently observed by him.

Dr. Campbell said, he had seen at least six such cases; and much more extraordinary, had seen scarlet fever recur within a few weeks of first attack. He also spoke of the severity of the complications in the present epedimic of Measles as Pneumonia, Pleurisy, etc.

Dr. Kennedy followed to same effect and cited a case where scarlet fever measles and whooping cough were interchanged among the children of one family. Dr. Kennedy also spoke of a case where he diagnosed measles 10 days before the development of rash owing to catarrnal symptoms and a prodominal rash

Dr. Campbell spoke of hooping-cough frequently following measles in this epidemic. He advised treatment with quinine with cures *in every case* within five or six weeks. He said the theory was that the spores deposited on faucas kept up irritation, and the quinine by causing profuse secretion led to these germs being washed away. This being theory, the practical point is that the treatment by quinine is very succcssful.

Dr. Reed said that Henock found that "the measles usually followed hooping-cough; and that quinine had failed in his hands; he finding morphia most efficient."

Dr. Trenholme said that in his hands Drosera Rotundifolia (Parke D. Extr., and Euco'yptus had done good service in Hooping cough.

Stated Meeting April 17, 1885.

Second Vice-President, Dr. Trenholme in the chair.

Tubercular Lung with Pleura from a case of Hydropneumo thorax.

Dr. R. J. B. HOWARD exhibited the specimen and said that on opening the thorax the right lung was emphysematous and contained many gray granulations about the anterior part of middle lobe. Left pleural cavity contained a blood clot measuring 17 oz. vol.: on removing this the pleural sac was everywhere lined by firm buff-colored membrane nearly ¼ thick. The pulmonary portion was equally thick, and binds the lung firmly down to the vertebral column. A small opening communicates with a cavity in lung: this opening being situated high up behind. So firmly attached was the lung that it had to be cut out: in doing this the cavity was opened. It occupied the whole upper lobe and would have held a hen's egg. Its walls were lined in the upper part by a smooth gray membrane, but the larger part of the walls were ragged and crossed in all directions by strands of tissue, in many cases consisting only of one or two vessels of considerable size. The cavity contained a good-sized clot. No open vessel was found. The lower lobe contained many *caseous* nodules.

Evidently the cause of death was hemorrhage from the pulmonary cavity into the pleural space in fact internal hemorrhage—a very unusua termination. The patient has had pneumothorax for months, and his chest was opened and drained about two weeks before. There was more fear that the operation might have caused or at least accelerated death: but I could find nothing to lend color to this view—in fact the obliteration of the pleural cavity from the bottom was commencing.

Dr. GEO. ROSS said he had first seen this patient about eighteen months ago, but that he had been in the hospital previously for months with phthisis and softening of the left apex. The day before seeing him he had been seized with severe pain in the left side accompanied with shortness of breath and distress. This continued for 24 hours. On examining, *pneumo-thorax* was found, therof was no fluid. The left chest was distended with air, the heart pushed over, pulse rapid, and he was cyanotic. After a time fluid gradually replaces he air till the left side was full. He was then tapped of serous fluid, giving great relief and feeling much better. Went home, when he improved and gained weight. He came to the Hospital once a month to be examined.

After some months the chest again refilled and he became feverish. He was again tapped, a seropurulent fluid coming away. The fluid rapidly re-collected accompanied with fever and emaciation. An incision between the ribs was made by Dr. Roddick and a drainage tube put in. The fever lessened though some remained. Pulse was still rapid. He was improving, till one day he suddenly became pale and exhausted and blood leaked out by the tube.

But for this accidental ulceration of the vessel in the lung he thought this patient might have recovered. A similar case had been treated by Dr. Wilkins and himself ten years ago, who recovered and is now alive.

Dr. KENNEDY said that this case recalled one he had seen years ago, that of a man who died from fracture of the skull. At the *post mortem* the right lung was found collapsed and in a fibroid condition the side of chest sunken in and the viscera had adapted themselves to the altered shape of the chest. The organs appeared healthy and the man would have lived years but for this accident. He had been operated on for hydro-pneumo-thorax two years previously.

Dr. Godfrey said he had seen a similar case where a woman died seven years after from tuberculosis of the opposite lung.

Stated Meeting April 31, 1885.

Dr. TRENHOLME in the chair.

PIECES OF NECROSED BONE FROM AN ABSCESS AT SIDE OF POTTS CURVATURE.

Dr. SHEPHERD exhibited 8 small bits of bone removed by him from an abscess at the side of the spine. A second abscess was on the side—both following inflammation produced by a kick over the part.

Dr. ARMSTRONG then read a paper on Antiseptic Midwifery (Published in May No. of RECORD.)

Dr. KENNEDY said he did not believe in treating a natural process as if it were pathological—He spoke against the use of the spray, etc., in labour, and thought that antiseptic injections were very seldom needed. The giving of these injections, by the physician was lowering him to the position of nurse. He had read of poisoning following the use of injections of solution of bichloride of mercury.

Dr. CAMPBELL endorsed Dr. Kennedy's views. During his 23 years of practice he had attended 1700 cases of midwifery, and only had six cases of

septic trouble, using only ordinary precautions. Most of the cases of septic poisoning were among the better classes.

Dr. A. A. BROWNE said he had never seen antiseptic midwifery carried out. He thought the main things to attend to were cleanliness and having fresh air. In the Vienna Hospitals the fresh air was heated before going through the wards.

Dr. SHEPHERD said that of late years the term antiseptic treatment had a wider meaning than Listerism. Lister himself says that the spray is the smallest part of the treatment.

50 per cent. of deaths used to follow amputation of the leg, now the death rate is 5 or 6 per cent. The case is not—did a lot do well without *antis eptics* but do all? He has notes of 20 major operations dressed antiseptically without a dea th and all but one healed by first intention.

Dr. TRENHOLME in over a thousand cases of midwifery he had attended, never had a case of septic, poisoning and only had two deaths, one from shock after delivery by forceps in a woman with a deformed pelvis. The second, a woman who got up and walked in the snow a few hours after delivery. He attributed hissuccess to following as far as he could Dr. Goodell's teaching, which was to have his patients walk from the room they are confined in, into the room they intend remaining in during convalescence. Also getting the woman to sit up every day for a few minutes. This to favor expulsion of clots etc.

He was also very particular to see that the uterus after delivery was completely emptied of all membranes.

Dr. CAMPBELL said he always orders his patients to use an ordinary chamber instead of the bed-pan, thereby necessitating her sitting up.

CASES IN PRACTICE.

Dr. CAMPBELL related a case of a gentleman who had gonorrhœa 2¼ years ago, and who, about a week after marrying a perfectly healthy lady had a recurrence of a discharge similar to his old gonorrhœa. Dr. Campbell, asked would this be called a gonorrheal discharge and be infective? Several gave it as their opinion that it was a case of non-specific urethitis such cases not being rare in newly-married men.

Dr. GODFREY said he knew of a young surgeon who contracted gonorrhœa aboard ship from the water-closet.

Dr. GURD mentioned a case where a young man got gonorrhœa from wearing a pair of trowsers previously worn by a man who had that disease.

CHILD WITHOUT NIPPLES.

Dr. KENNEDY described the above condition lately seen by him in a boy, no rudimentary glands could be made out.

Dr. SHEPHERD said that more of such cases were recorded where deficiency was only on one side.

Correspondence.

To the Editors of the MEDICAL RECORD.

Would you further oblige by putting in the subjoined in your next number.

When *Wonderer* was in a state of wonderment, when he asked in your March number: "What a Christian M.D., or, for the matter of that, a Homeopathic or Hygienic M.D. would do if called upon to attend a case of cholera morbus," I imagined that by that enquiry, *Wonderer* looked upon cholera morbus (simple as it might be) beyond the remedial powers of either the Homeopathic or Hygienic M.Ds. alluded to. I therefore—without the intention of evasion—mentioned what had been done with the more severe disease of Asiatic cholera under the inspection of Dr. McLouchlan, because, if the Homeopathic treatment was so beneficial in the more severe form of disease, Wonderer might be satisfied that the more mild disease would likely be as easily controlled. I may say that although cholera morbus, cholera nostras, Europœa or Canadian, cholera Indica, Asiatica, may generally be easily differentiated, still there are some cases of British cholera, or Canadian cholera morbus, closely resembling the severest forms of the disease which occur in Asia, or any other country. I have seen such cases in Montreal, one of which was attended with incessant vomiting, alternated with profuse rice-water stools, the pulse hardly to be felt. There were cramps in the lower extremities, and over all the abdominal muscles, which were as hard as a board, at times causing the patient to writhe in pain with what little strength remained. There was excessive thirst, and inability to speak or open his eyelids, cold, clammy perspiration, with cold breath, and other symptoms, indicative of apparent fatal collapse, yet this case gave evidence of

recovery within three hours after the administration of the 3d decimal dilution of the homœopathically selected remedy. Instead of promising to tell Wonderer how to treat cholera morbus, simply upon its being named, apart from the totality or key-notes of the symptoms, in the case, presented; I told him to study such works as I referred to, and stated that he would find therein the appropriate remedy for the key-notes or totality of symptoms, although not for the treatment of the individual disease by mere name that is, the homœopathically correct method of prescribing, whether the disorder is cholera nostras, cholera Britannica or cholera Asiatica. He does not require to consult authorities, for what they would give in cholera morbus, or dysentery, or nephritis. He comes closer to the root of the evil the other way, besides it gives pleasure to some minds to know that you are prescribing according to a law of cure.

I likewise thought that *Wonderer* had considered that the allopathic treatment of cholera morbus was something substantial, bulky and efficient, in doing good instead of harm, and not a delusion and snare, as he infers, when he says in your May number, viz., "I do not believe that any remedy has yet been discovered which exercises any appreciable effect upon the cholera." ! ! !

Well, there is no accounting for beliefs; in this correspondence I am replying to the person in your March number, whose identity is recognized only by the words, "*I Wonder*" and in your issue of May by the word "*me*." These are synonyms not generally considered worthy of reply, but I am not at all disposed to find fault, with even these idiosyncrasies. The summation of the logic of "*me*," then, is this, "That Dr." McLouchlan, and all Homœopathic Physicians are deluded, into "thinking they are giving remedies when they are not." I suppose that "*me*" believes that that assertion is very strong in condemnation of McLouchlan and Homœopathy. However, I am not disposed to find fault with his right of belief, facts are better than beliefs in my estimation, and McLouchlan's and other similar testimonies relate *to facts*, regarding the cases of cholera McLouchlan saw, he says: "that all were true cases of cholera, which would have sunk under other than Homœopathic treatment."

Yours truly,

JOHN WANLESS, M.D.

MONTREAL, June, 1885.

Progress of Science.

ON HÆMOPTYSIS AND ITS TREATMENT.

By SEYMOUR TAYLOR, M.D. Aberd., Physician to the North London Hospital for Consumption, &c.

In discussing hæmoptysis and its treatment, I would at the onset wish to state that the following remarks relate only to such cases in which there is a suspicion that pulmonary tubercle is present. It is probably a correct assertion that there is no complication in phthisis more alarming to the patient and his friends than a severe attack of pulmonary hemorrhage. It is equally probable that of all the more grave symptoms of phthisis hæmoptysis is *per se* of less moment as regards its immediate danger than many others to which less attention is paid. In laying down this rule I refer mainly to an ordinary case of blood-spitting and such severe forms as suffocative hæmoptysis, in which an aneurysmal dilatation of a blood vessel suddenly ruptures, are not for the moment taken into consideration. The mental disturbance which a patient undergoes when suffering from hemorrhage is one of the difficulties the physician has to meet; but in many instances this great factor is overlooked, and we concentrate our energies in prescribing astringents which often fail, and perhaps as often do harm. The treatment generally advocated is guided by arbitrary rules; and remedies are ordered often with no scientific knowledge of their action, but more in accordance with empiricism. It is generally acknowledged that hæmoptysis, in however slight a form, is one of the sure signs of tubercular phthisis; but it will be as well to admit that it may occur without the presence of tubercle, and also that it may be found in some cases of phthisis in which the presence of tubercles is of secondary import as regards the cause of bleeding; or, in other words, that hæmoptysis may arise from disturbances in the vascular current through the lungs, such disturbances being independent of the presence of new growth. On the other hand, not a few cases of rapid phthisis run their course to a fatal termination without their having been at any period any hemorrhage whatever.

In a majority of instances I am of opinion there should be no undue precipitancy in employing many of the astringents usually advocated. It has certainly been my experience that in the early stage of pulmonary consumption a small amount of hemorrhage has been rather beneficial than otherwise. A blood-spitting at this period is merely a method of nature to alleviate a congested apex. Consequently it is a congestion we have to combat, not the subsequent hemorrhage. We see a similar course of events in epistaxis, in bleeding from the bowel, yet no medical man would think of applying astringents and styptics in these latter cases unless the amount of blood

lost be very great. On the contrary, he often finds painful symptoms, are dispelled by the very hemorrhage. But should such an occurrence happen in connection with the lung, we are told to give acetate of lead, gallic acid, and other astringents, which it is hoped will act on the vessels of the lung, a treatment which, I submit, is not correct, nor yet scientific. Our best treatment this period is to attend to the sufferer's general health and condition. Do not restrict him from gentle exercise, but at the same time distinguish between exercise and over-exertion ; and let us remember that the former has a tendency to the promotion of a more perfect circulation, and this, I take it, should be one of our chief aims in the treatment at this period. The patient suffering from hemorrhage of the first stage has, I find, a better chance of speedy recovery if he pursues a healthy occupation than one who is ordered to be confined to his bed. Blood-spitting is quite as frequent amongst the in-patients as amongst those attending the out-patient rooms ; and yet, owing to patients being admitted, according to priority of application, the cases are no more advanced in disease in the wards at Hampstead than they are in the out-patient rooms.

As regards climate, I believe we have in this country certain situations, the adaptability of which we have overlooked in our treatment of consumptives. It has been my experience that patients have derived much benefit from residence in the high lands around Buxton and the Derbyshire Peak. The few cases I have sent to that locality have certainly returned to town with much diminution in their worst symptoms, and notably with arrest of hemorrhage. On the other hand, I cannot speak so favorably of the results of residence at Bournemouth, Hastings, and other relaxing towns on our southern coasts. The treatment of the severer forms of lung hemorrhage occurring in the second and third stages is more difficult to determine. It is generally felt by the physician that some decisive treatment must be speedily adopted, some steps taken to at once arrest the copious bleeding. Notwithstanding this, I believe the experience of most practitioners will lead them to conclude that in a majority of cases the hæmoptysis stops spontaneously. We must remember the comparative rarity of death occurring from hæmoptysis. I have seen only one death occur during an attack. Other writers also confirm this opinion. For example, so careful and extensive an observer as Dr. C. J. B. Williams states that he has seen only three deaths from hæmoptysis. Again, the late Dr. T. Locock asserted that only 1 per cent. of the cases of hæmoptysis die from that cause, and even that is an average higher than I had expected. Taking these views as correct, I apprehend that the administration of large doses of gallic acid or of sulphuric acid is scarcely correct treatment. These drugs can have little or no effect on a remote apical lesion. On the other hand, I am sure I have seen them do harm by glueing up the intestines, and so favoring a continuance of the hemorrhage, by increasing the arterial tension. To my mind the administration of a purgative would be more rational treatment. A similar doubt as to the efficacy of some other astringent drugs has continually been under my consideration. With some medical men acetate of lead has great repute ; others employ chloride of sodium in large doses. Alum has its advocates, and so has tartar emetic, and even mercury. The clinical records of the Paris hospitals have been used to endeavor to prove the efficiency of ipecacuanha. Hamamelis has become a fashionable drug. As a consequence one is embarrassed with the number of remedies, some of which have been almost lauded as specifics. But I am obliged to say my experience of their power for real good is not satisfactory.

As regards outward applications, the conclusion I have drawn from careful observation is that an ice-bag placed on the chest is a valueless proceeding. I have never yet convinced myself that the application of such excessive cold can astringe a ruptured vessel through a pad of muscular tissue, of bones, and also (if the hemorrhage be deeply seated) of condensed lung. Further, the ice-bag is almost invariably planted over the front of the patient's chest, wherever may be the seat of the hemorrhage. I am more than doubtful how this application, with its damp depressing discomfort when placed on the parietes of a man's thorax, even over the supposed seat of a hemorrhage, can have any effect in arresting the same. We seem by this step to overlook the one great factor, rests in staunching an internal bleeding. It precluded the patient from sleep, his mind is disturbed in consequence, and he apparently loses rather than gains from the treatment. Does it not seem more probable that the cold, acting on the superficial vessels of the chest-wall, would rather tend, if anything, to increase an internal disgorgement ? On the other hand, I can with confidence recommend an opposite line of treatment—viz., the application of warmth. In three cases recently of severe hæmoptysis I have seen beneficial results from such steps. I applied hot flannels (at about 120° F.) over the angles of the ribs from summit to base of the thorax—in other words, over the sympathetic ganglia—and in each case with speedy and happy results. I cannot claim that this method of treatment is by any means novel. It was advocated by Dr. John Chapman in 1875 in an able paper ; and I submit that it has not been adopted by practitioners so frequently as it deserves. We see the same principle adopted by obstetricians in cases of uterine hemorrhages, and there is scarcely a week passes but the medical journals contain reports of successful treatment of flooding by hot-water injections into the uterus, as opposed to the old-established practice of applying ice.

Turning now to medicinal remedies, I must confess that we have only a few drugs which we may really regard as controllers of pulmonary hemorrhage ; but these few are really valuable. We too often overlook the clinical fact that in hæmoptysis one of the most urgent conditions to treat is the great restlessness and mental disturbance of the sufferer. He is in a state of great excitement and alarm, a condition a'so imparted to his friends, and by them, as it were, reflected on the patient again. This point requires our skill and attention. We have at our command a drug, opium (and its derivatives) which acts like a charm. So far as my experience goes it should not be given if administered internally with any other remedy likely to retard or interfere with its full action. Give it in such doses that its physiological effects are produced. If the hemorrhage be very profuse digitalis may be added, but also in large doses, such as fifteen minims to twenty minims of the tincture, till its specific action on the heart is manifest and the frequency of the pulse materially diminished. As a result the patient is calmed, his excited circulation controlled, and he falls into a much-needed sleep. There is yet another method of administering the sedative —viz., by hypodermic injection ; and I have found this plan most useful and efficacious. Four minims of the injectio morphiæ hypodermica are introduced into the subcutaneous tissue of the arm, or, as I have sometimes preferred, into the subcutaneous tissue of the chest immediately over the presumed seat of the hemorrhage, and repeated if requisite. The advantage of this method of exhibiting the remedy is its speedy action ; the momentary and trivial discomfort of the operation is more than counterbalanced by the good results which ensue. Of the forty-seven cases the notes of which I have before stated form the basis of this paper, eighteen were adult patients suffering from severe pulmonary hemorrhage occurring in the second or third stages of phthisis, and were treated. by opium and digitalis internally or by morphiaf hypodermic injection, with good results in all. So far as I am able to judge of the effects o remedies the above method of treatment is happier in its immediate results than the administration of astringents and so-called styptics, which mainly affect the intestinal tract. Indeed, one of my chief desires in making this communication is to protest against the ordinary practice of prescribing drugs which probably do nothing more than produce a constipation, or the action of which on the circulatory system is more than open to doubt. There are, however, two other drugs which I have found extremely useful when opium is contra-indicated. I allude to oil of turpentine and the liquid extract of ergot. The former may be given by the mouth, the latter either by the mouth or by subcutaneous injection. I have seen excellent results from both in a few cases. The objection to turpentine is its nauseating effect, but its action in controlling hemorrhage is undoubted. My experience of ergot has not been extensive, but I found it a powerful remedy in four cases of severe and continued blood-spitting.—*Lancet.*

ON INTERMITTENT PULSE, AS A SIGN OF DISEASE, AND ITS TREATMENT.

By the Editor of The Asclepiad.

This affection is due to nervous exhaustion of the vital nervous system, and in this day of emotional strain and excitement it must prevail in proportion to the causes of it. In itself, when it is not present in an exaggerated degree, intermittency of the pulse is often less dangerous than it seems. It does not, as might be feared, carry with it the necessary idea of sudden dissolution from heart disease, for, as I have elsewhere shown, the heart is the regulator, not the prime mover, of the circulation. The harmlessness of the symptom in its moderate development is best shown by the facts of its common occurrence after middle age, and by the long duration of life in many of those who present it.

Occurring in young adults, it tells the story o-commencing failure of power. Occurring suddenf ly after any great event, which has told upon the mind, it may be a sign of serious import. In persons advanced in life, and in persons prematurely old, intermittency is often the herald of symptoms of nervous failure. In these examples the patient has sometimes a singular preconception of impending danger.

In the large majority of patients there is an unconsciousness of the intermittency. We listen to the heart, we hear the phenomenon distinctly ; we ask the patient, at the moment, whether he is conscious of feeling anything peculiar ; he tells you he is not. In such instances, the intermittent phenomenon does not cover more than what would be one or at most two natural periods of cardiac contraction, and there is a long interval before the return of it. But when the intermittency covers a period equal to five normal strokes, or when it is repeated in shorter periods several times in the minute, then the patient is painfully, often fearfully conscious of the fact. Then breathing becomes irregular, then there is difficulty in keeping the recumbent posture, then there is sleepless agitation errible mental depression, a constant dread of, death, sometimes with a singular longing for that event, and finally, death itself, not suddenly, but by a lingering and sinking asthenia. I have seen one well-marked case, in which it was impossible to attribute death to a ıy other cause than intermittent cardiac action, and I do not remember any case where the symptoms, which long preceded death, were more acutely painful.

Persons in whom there is permanent intermittent action of the pulse pass through all acute diseases with less chance of recovery than others of similar age and like constitution who have no such failure. They sink more readily from surgical

operations, from falls and injuries, from influenza, from acute congestion of the lungs, from inflammatory attacks, and particularly from typhus and typhoid fevers. I would look upon a man's chance of recovery from typhoid if he were fifty years of age, and had a steady heart, as preferable to that of another man at forty, in whom intermittent action of the heart was developed before the occurrence of the disease, or in whom the symptom came on, as it sometimes does come on, in the course of the disease.

In adults, when the symptom is once established, it never, I believe, goes away entirely. It may be absent for long periods when the general health is good, but it returns on every occasion of depression of power, and is very easily re-induced by agencies which act deleteriously on the nervous system. Excessive venereal gratification, excessive smoking, deficiency of sleep, or dissipation, act powerfully in increasing the evil. In persons at or past middle age, the symptom, if it once be fully developed, continues persistently, and often to extreme old age. One of my patients, who died at eighty-six years of age, told me he had been discovered to have an intermittent pulse when he was forty-two, and that he had never failed to exhibit the phenomenon since that time. I have noticed often the hereditary character of the phenomenon. On the fact of heredity, there can, I think, be no doubt.

There is no known specific treatment for intermittent pulse, but whenever the symptom of intermittency is present, there are certain general lines of treatment which should always be enforced by the physician. In the case of young children, when the intermittency is clear, however infrequent it may be, the utmost care should be taken to avoid every source of mental emotional excitement. A child having intermittent pulse should not, under any pretence, be oppressed with study. He should not be subjected to any amusements which powerfully excite the mind; he should not at any time be exhausted by physical fatigue; he should be well fed, warmly clothed from head to foot, and above all things, should be allowed to have abundant sleep. Ten to twelve hours' sleep is not a moment too much. Moreover, such a child should never be put to sleep with stories which excite dreams or cause alarm. In adults, equal care should be taken, and, above all things, attempts should be made to remove impressions derived from any untoward event. Change of scene should be recommended, while a carefully regulated diet, abstinence from exhausting pleasures and abstinence from exhausting labor, especially mental labor of any one particular kind, should be encouraged. Good sleep is here again the most valuable of remedies. Eight hours of sleep out of the twenty-four are essential, nine hours are still better. Two other special points of advice are of moment. It not unfrequently happens that, by accident or by direct information, patients learn the fact that their pulse intermits. Then they begin to feel their own pulse, and become charged with dread of sudden death. As the disorder is of itself mental, this watchfulness and fear will increase the frequency of the intermittency. With these patients, a word from the physician, timely and firmly spoken, is often the best prescription. He assures them, on the results of experience, that their malady is not of necessity fatal; he recommends them not to enquire after the symptom, and if he can succed in persuading them to his views. which he may honestly try to do with all his influence, he will effect the most marked improvement in their condition. Again, it sometimes happens that patients conscious of the failure of the heart resort to alcoholic stimulants as a means of relief. For a moment, by its exalting the activity of the heart, alcohol affords relief, but the depression that follows calls the more rapidly for a return to the supposed remdy, and a fictitious benefit leads to a habit which excites structural changes and hastens death. Concerning aged people who suffer from what may be called chronic intermittency without consciousness of the symptoms, no special rule requires to be laid down. They are themselves usually too tired of the excitements of life to care for them, and if they are not, then the observance of the general principles applicable to children and adults extends equally to them.

Whenever with intermittency of the pulse there is anæmia with inactive condition of the bowels, and distention of the stomach and intestines with gas, it is very good practice to add, to the general rules of treatment, "a tonic," so called, and of all tonics Easton's Syrup of the Superphosphate of Quinine, Iron, and Strychnine, is one of the best. This syrup, which contains the thirty-second part of a grain of strychine in a fluid drachm, should be administered in doses of a drachm three times daily, a little time after food, and the patient should be induced to look upon the remedy in the light of a food rather than a medicine. The syrup, under the careful observation of the practitioner, may be continued for two or three months at a time without danger. When there is much restlessness with the intermittency, as well as want of power, I am accustomed to administer one or other of the bromide syrups. The syrups of the bromide of Iron, Quinine and Strychnine, or of the Bromide of Iron and Strychnine, or of Quinine, and Strychnine without the Iron, replace Easton's preparation very effectively. The dose of these syrups is one fluid drachm.

There are classes of cases in which intermittent pulse is connected with great general prostration and premature breaking up of the body; cases in which there is some organic disease, such as chronic bronchitis, emphysema, senile phthisis, chronic degeneration of the kidney, or other organic change; or some general systematic disorder, such as diabetes or cancer. In any of

these cases the intermittent action is a terrible addition to the distress of the sufferer, and it may require to be treated itself as the worst present evil.

I have made many inquiries in order to ascertain if there be any one particular remedy which so influences the nervous mechanism of the heart as to exert an immediate controlling effect over intermittent action. The result of my research is that there is only one agent which can be said positively to influence it effectively—I mean to influence it *at once* in such determinate manner that an effect is seen to follow upon a cause. The agent to which I refer is alcohol, and the mention of alcohol brings up the whole question of its use in cases of intermittent action. In intermittent pulse this direct action of alcohol on the heart is shown with singular effect. I have seen in an extreme case, where the fact of intermittency was recorded ten times in the minute at least, a total cessation of the phenomenon within five minutes after the administration of six fluid drachms of pure alcohol in water, the circulation at the same time being rendered more rapid. This action of alcohol is so decisive that the patient himself soon becomes conscious of it, and unfortunately resorts sometimes to the remedy to his ultimate disadvantage.

Contrary to what I originally taught, I now recommend that the sufferer from intermittent pulse should abstain from every alcoholic drink known as a common drink or beverage. At the same time I would not withhold the occasional use of alcohol in extreme conditions, or what may be called emergencies. If after great fatigue or excitement or anxiety, there is sleeplessness, restlessness, and painful knowledge, on the part of the patient, of the hesitation of the circulation, half a fluid ounce to six fluid drachms of pure alcohol, mixed with warm water, will act, generally, in the most effective manner. It will bring rest, and often sleep. But it must be repeated only after an interval of seven or eight hours; if it be carried to the extent of producing the third, paralysing or narcotic, degree of alcoholic stimulation it will have conferred evil instead of good.

In some instances, instead of prescribing common or ethylic alcohol, I substitute pure methylic alcohol. This is a much lighter spirit, and is eliminated more quickly from the body. The dose is the same as for common alcohol, and may be prescribed in precisely the same way, with the advantage that it may be more frequently repeated than the same dose of ethylic alcohol. It will be seen from these observations that I recommend the use of alcohol purely as a medicine. I do so most earnestly, under the conviction that whenever it is more than a medicine it is far more harmful than useful.

Tea does not produce intermittent pulse, but when the symptom is present it very seriously increases it; tea, in short, is an article of diet which in all cases of irregular action of the heart should be scrupulously avoided. Coffee is less objectionable. Food should be taken by sufferers from intermittent action in moderate quantities and *frequently*. Long fasting is unspeakably prejudicial, and makes itself speedily felt by the patient, who suffers, while fasting too long, from an indescribable exhaustion, which is not hunger and not faintness, in the natural sense of those terms, but a strange mixture of both sensations, with a frequently recurring impression that if food do not immediately come death must. The nervous supply of the heart in these cases is sensitive to the least failure of power, and requires renewal every three or four hours during the working day. At the same time the system rebels against a large, oppressive meal difficult of digestion. Care should be taken, also, to protect the body from damp and wet. In a word, every such provision should be made as will sustain equality of the vital processes, so that the nervously disabled heart may neither wait long for new support nor be overtaxed with work.

[In our experience intermittent pulse in middle life is almost always connected with anxiety—usually pecuniary or business anxiety.—EDS.]—*The Asclepiad.*

THE CANADA MEDICAL RECORD

A Monthly Journal of Medicine and Surgery.

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MONTREAL, JUNE, 1885.

COLLEGE OF PHYSICIANS AND SURGEONS PROVINCE OF QUEBEC.

The semi-annual meeting of the College of Physicians and Surgeons of the Province of Quebec was held at Montreal on the 13th inst. The President, Dr. Lemieux, in the chair. There was a good attendance of governors, among them the Hon. Dr. Robitaille, ex-Lieut.-Governor of Quebec.

Reports from assessors of McGill, Bishop's, Victoria and Laval (Quebec and Montreal), were received and adopted.

The Report from the Board of Preliminary Examiners was read. Sixty-two students presented

themselves, of whom 29 who went up for the first time were successful; 10 who presented for the second time were successful; 17 were rejeted on certain branches, while 6 were rejected for general deficiency.

The report of the agent of the College, Mr. Lamirande, was read. During the past six months, the College gained six cases, lost one, and five are still before the Court.

A petition from Mr. Tierney of West Farnham to be allowed to continue to practice medicine, on the ground of his having done so for 25 years, was refused, the College not being possessed of any such power.

A report on certain charges made against the College agent, Mr. Lamirande, was presented. It stated he was not free from blame, had acted beyond the scope of his authority, and recommended that his duties be more clearly defined.

A motion was made by Dr. Durocher, seconded by Dr. Rinfret, suggesting that at the preliminary examination for admission to study, the papers of candidates should not bear the name of the writer, but that of a *nom de plume*.

A report was presented from a committee appointed at last meeting to examine the financial condition of the College. Its consideration was postponed till next meeting.

A notice of motion was given to place the collecting of the annual dues again in the hands of the Registrar, and for this and his duties of registrar pay him $400 a year.

On the report of the commitee appointed one year ago to investigate the charges made by Dr. Lachapelle against Victoria College, the consideration of which was postponed from the last meeting, being brought forward, it was moved by Dr. Marsden, seconded by Dr. L. Larue, that the report of the committee be received. This was carried without discussion.

A notice of motion authorizing the President in certain cases to issue an interim license was brought forward and carried unanimously. The notice of motion for a Central Examining Board received a six months' hoist.

MONTREAL GENERAL HOSPITAL.

The annual meeting of the Governors of this Hospital, which was held on the 21st of May, was looked forward to with considerable interest, as the vacancy on the attending staff of physicians, created by Dr. Osler's removal to Philadelphia, had to be filled. Although a vacancy on the outdoor staff had also to be filled, the interest centred in Dr. Osler's vacancy. The candidates were Dr. R. L. MacDonnell and Dr. F. W. Campbell, and the result was the election of Dr. MacDonnell, who polled 93 votes and Dr. Campbell 71 votes. Both sides we presume brought forward every vote in their power, and the number polled is, we believe, the largest in the history of the Hospital. If the contest had been an ordinary one we would have been content to have simply chronicled the result. It was, however, not an ordinary one. It was a contest between the old established Medical Faculty of McGill and the younger Medical Faculty of Bishop's College, the former being determined to maintain their monopoly, which, so far, they have been enabled to do, of the Indoor Staff. That the feeling among the Governors of the Hospital against this exclusiveness is very strong is proved by the large vote Dr. Campbell polled; and, although defeated for the time, we are satisfied that the day of victory is not far distant. We feel confident of this because, the principle for which Bishop's College is fighting is one which must in time commend itself to all who believe in British fair-play. It is a principle which has not been fought for the first time within the walls of our General Hospital. Other hospitals in our own country and abroad have felt the dead weight which attach to such monopolies, and the result has been their complete destruction. We believe a similar fate awaits it here.

THE DAVIS & LAWRENCE COMPANY.

Among the constant advertisers in the CANADA MEDICAL RECORD is the firm now known as the Davis & Lawrence Company. For many years they have occupied several of our pages, their steady support being, we believe, mutually advantageous. We have noted their onward progress, and have with much satisfaction watched their constantly-increasing success, reflecting, as it does, the greatest credit upon its management. From comparatively small premises in the city proper, they, a few years ago, moved into the Western suburbs, occupying there a building of considerable dimensions. This was soon found to be too small for their steadily-increasing business, and a few months ago they left their old quarters to

occupy a manufactory specially erected for them. This establishment, a cut of which we give, is not surpassed either in the United States or Canada. In extent it covers three sides of a square, having a total frontage on three streets of 404 feet, with an inner court in which is built the boiler house. It is four stories high, with the basement, and is built entirely of brick and stone, the St. Antoine street front being handsomely faced with sand stone. For substantial structure and architectural beauty it is doubtful if it is excelled by any factory building in Canada. Every modern improvement that would facilitate the business has been adopted, such as steam elevators, hand railways, machines for bottle-washing, bottle-filling, bottle-corking, etc.

Commencing at the top floor, which is set apart entirely for laboratory purposes, was found long rows of percolators for the manufacture of fluid extracts, pill-stamping machines, great copper boilers, huge tanks, and many other things too numerous to mention.

Hundreds of preparations are manufactured in this establishment, comprising Fellows' Syrup of Hypophosphites, which is so highly valued as a tonic in wasting diseases, etc., and which is so extensively prescribed; Murray & Lanman's Florida Water, the original and only genuine Florida Water; Brown's French Dressing, that favorite polish for ladies' shoes; "Maud S." Condition Powder, which is now taking high rank in the estimation of horse owners; Burnett's Standard Preparations, consisting of flavoring extracts, etc.; Lotus of the Nile, that Queen of Perfumes; The "Royal" flavoring extracts, new and popular; Ricksecker's elegant line of first class perfumes; Wyeth's splendid line of pharmaceutical preparations, which are so highly spoken of by physicians as being thoroughly reliable, comprising a full and complete line of elegant medicinal Elixirs, Fluid Extracts and Compressed Pills, besides their celebrated "Beef, Iron and Wine," "Chlorate of Potash Tablets," "Menthol Pencils," etc., etc. All these and many others are manufactured in this laboratory department. Descending to the next floor we find the bottling and packaging department and store rooms for finished goods; here also printing presses are at work, for this company do much of their own printing work. Again descending we come to the finishing apartments, shipping departments, sample room, and the handsome and spacious offices. The basement is used for the storage of cased goods and as a bonded warehouse.

VACCINATION.

The recent outbreak of variola in Montreal, an unfortunate occurrence in itself, has been attended by several most unpleasant circumstances. The non-isolation of the first case which arrived in the city, and was taken to the Hotel Dieu Hospital, has already been referred to. The quality, of the vaccine furnished by the officer of the Health department being called in question a committee of Medical experts was formed, who examined several of the large institutions where many inmates had been vaccinated, and found indisputable evidence of the introduction of septic matter into the wounds produced to receive the vaccine virus, and of course, several cases occurring together and with the same history, the conclusion was inevitable that the vaccine virus used had not been pure.

The result is particularly to be regretted, since in Montreal, among a certain class, there is already such a strong feeling against the adoption of that sure and certain preventative and, if carefully prepared, that safe preventative, of one of the most dreaded and loathsome of all preventible diseases. And yet in the face of such an experience as this we find the authorities that be fighting and squabbling over the appointment of a Medical Health Officer, evidently the prime consideration being nationality and religion rather than training, executive ability and knowledge of the duties pertaining to the office. Where will this sort of thing, if persisted in, lead us to?

MEDICAL JOURNAL ADDRESSES.

We have just received from the Illustrated Medical Journal Co. of Detroit, Michigan, several sets of their Perforated Adhesive Medical Journal Labels. The list includes besides the Journals of the United States that are devoted to Medicine Pharmacy and Hygiene, those of the Provinces of Canada as well. Four complete sets will be mailed postpaid for fifty cents on addressing the publishers above named. They are just what every physician needs for addressing his Reprints for journal notice, and Medical Colleges for addrssing their Announcements for a similar purpose.

ACTIVE SERVICE IN THE NORTH-WEST.

It was not very creditable to our profession that of the two regiments called on active service in the North West neither took their gazetted medical officers with them, substitutes being provided. Where all the officers had to suffer some loss, either of business or income, the same should have been expected of the Surgeons. In the case of Dr. Mignault there was, however, a more valid excuse which was mentioned in a previous number. Since then Dr. Mignault has written us as follows:

"On the 2d of March, I had an attack of *hmoptysis*, after a rather long lecture in my anatomical amphitheatre.

The 65th was called out on the 28th of March. I consulted several physicians as to the advisability of my going, their opinion was unanimous, under the circumstances, against the journey.

I furnished my substitute with a complete *suit* and all necessaries for the trip.

Since then, feeling better, I wrote to Lieut.-Col. Ouimet, placing my services at his disposal, if required for the Battalion."

PERSONAL.

Dr. O'Reilly, Medical Superintendent of the Toronto General Hospital, sailed in the *Parisian* of the Allan line for Europe on the 30th of May.

Dr. William Gardner has been elected Gynecologist to the Montreal General Hospital.

Dr. George W. Major has been elected Laryngologist to the Montreal General Hospital.

Dr. R. L. McDonnell has been elected a Physician to the Montreal General Hospital, in place of Dr. Osler resigned.

Dr. A. D. Blackader and Dr. F. W. Campbell have been elected Assistant Physicians to the Montreal General Hospital.

Dr. James Bell has been elected an Assistant Surgeon to the Montreal General Hospital.

Dr. William Stephen of Montreal has recently left the city for Vienna, intending to devote his attention to Diseases of the Eye and Ear. It is said that his intention is to settle in Buenos Ayres.

Dr. Wm. McClure (M.D., McGill) has been elected Medical Superintendent to the Montreal General Hospital.

Dr. Major, Laryngologist to the Montreal General Hospital, has gone to Vienna for a few months.

Dr. Finley of Montreal, Dr. Gustin of London and Dr. Eberts (M.D., McGill, 1885) have been appointed Resident Medical Officers of the Montreal General Hospital.

REVIEWS.

The London Medical Student and other Comicalities. Selected and compiled by HUGO ERICHSEN, M.D. Detroit, Michigan, 1885.

It is almost half a century ago since the London Medical Student was published in the London *Punch*, and when we began our studies a quarter of a century ago it formed part of almost every medical students' library; lately, however, it has been difficult to obtain, and therefore has not been as much read as formerly. Dr. Erichsen has therefore done a thing to be commended in re-printing it, on this side of the Atlantic, for a more enjoyable medical sketch is not to be found The medical man who can read it and not be convulsed with laughter is one to be pitied, for it is full of wit and humor as a nut should be full of meat. The remainder of the book is full of medical jokes collected from an immense number of sources. Many of these are splendid, and Dr. Erichsen has done the profession a good service in collecting them in so permanent a form. Altogether the book is well worth the cost, and it should be in the hands of every medical man in the Dominion. We predict for it a large sale. It can be ordered direct from Dr. Erichsen.

The Oleates: An Investigation into their Nature and Action. By JOHN U. SHOEMAKER, A.M., M.D., Lecturer on Dermatalogy at the Jefferson Medical College; Physician to the Philadelphia Hospital for Skin Diseases; Member of the Pennsylvania State Medical Society; The Minnesota State Medical Society; The American Medical Association; The American Academy of Medicine; The British Medical Association; Fellow of the Medical Society of London, etc., etc., etc.

In this book Dr. Shoemaker gives an account of his investigation concerning the oleates. The author is certainly one of the best authorities on this new and very useful class of remedies.

The indication and method of preparing the different oleates are very clearly given. No physician pretending to treat skin diseases should be without a copy of this very instructive little book.

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CHOLERA AND THE COMMA BACILLUS

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(Read before the Medico-chirurgical Society, June, 1885.)

I draw your attention to this subject this evening more with a view of eliciting a discussion upon it than with the hope of adding anything to your knowledge concerning it.

It is well, I think, that we should now especially direct our attention to the consideration of what is already known about cholera. Few of us have ever witnessed an epidemic of this affection, but it is the expectation of many, and a study of the history of previous epidemics would indicate that we may be called upon this summer to contend with an invasion of this scourge, which, in a majority of instances, baffles the most skilful treatment and resists every device of therapeutics.

All epidemics of cholera have their origin in the region about the delta of the Ganges in India, and the course pursued by those which have reached this continent has usually been northwestward through Afghanistan and Persia, over the Caucasus, or along the Caspian to Russia, thence through northern Europe to England and across the Atlantic. The epidemic which threatens us this year is taking a shorter route: it left its seat about 1880, prevailed in Arabia in 1881 and 1882, ravaged Egypt in 1883 and France in 1884.

This year, its existence has already been reported in Calcutta, Toulon and Marseilles, and in the province of Valencia and other parts of Spain it is epidemic. Should it spread to England the probability of its being conveyed to this country will be great.

Before entering upon the subject indicated by the title of this paper I may mention a few facts concerning disease germs:

The germ theory of disease refers to the introduction into the system of the lowest type of plants which, from being found in the body in connection with many specific diseases, are supposed to be their cause. They belong to the lowest group of plants, the protophyta, class schizomycetes, order bacteriaceæ. These minute plants (bacteria) consist of a single cell, and reproduce themselves by dividing into two (fission), and these again into two, and so on as long as they are provided with nutriment; failing which they form a powdery precipitate, which is regarded as a resting state. The spores thus formed having the power of germinating again when the surroundings are favorable. Bacteria require moisture or fluids for their development. They consist chiefly of protoplasm, have no chlorophyll, and are sometimes provided with cilia (also called the flagelli) which by their lashings enable them to move about in liquid media. The cells sometimes appear in groups, held together and separated from each other by a jelly-like matrix, formed by a partial degradation of their cell walls. This is called the zooglea form.

Pasteur terms bacteria which require free oxygen, *aerobies*, and those which can live without free oxygen but have the power of wresting it

from its combination with other elements, *anærobies.*

There are three sub-divisions or genera of bacteria:—1. Micrococcus, when the cells are round- or elliptical; diplocoçcus, two of them joined together; streptococcus, if united into a chain. 11. Bacillus cylindrical rod-like or filiform cells. Cohn termed curved filiments vibrios. iii. Spirillum, spirally twisted or screw-shaped cells.

In order to detect these minute and almost invisible organisms and study their characters and habits, microscopes magnifying from 400 to 1,000 diameters are required. They are so minute that according to Dr. Dallinger 50,000,000 would not occupy a space greater than the 1-50th part of a cubic inch. They are found wherever organic matter, animal or vegetable, is undergoing decomposition, in stagnant water, and all solutions containing organic substances, and dried bacteria or their spores are found in myriads adhering to every object around us and to the minutest particles of dust floating in the air, seen in a ray of sunlight, and which make the ray visible.

The decomposition or putrefaction of organic matter and the process of fermentation are solely the result of the life-work of bacteria.

Having no chlorophyll they develope only in fluids and other media containing organic matter, and thrive best where it is abundant.

They develop very rapidly under favorable circumstances; according to Cohn a new generation can form in an hour. They require a certain amount of heat for their development which varies with different species; cold and high temperature arrest their development; in the moist state a temperature of 140° F. will destroy them, but a higher degree is required in the dry state.

The spores of bacteria are of all living matter the most difficult to destroy, are unaffected by low temperatures, and require in the moist state the temperature of boiling water to destroy them, and when dry a temperature of 300° and over. Bacteria thrive best in alkaline solutions, hence in the stomach the normal acid present during the process of digestion checks their growth, but they grow luxuriantly in the intestines where they are supposed to assist in normal digestion. In normal healthy animals they are not found in the blood or tissues. The latter must have the power of overcoming the ordinary bacteria of putrefaction; but certain species are capable of holding their own there and multiplying, when a disturbance in the animal economy ensues, which is shown in the symptoms of the various infectious diseases. These are the diseases producing a pathogenic germs.

It was a Dutch microscopist named Leeuwenhoek, who first announced, in the year 1683, the discovery of these minute micro-organisms which are now known to be so intimately connected with the processes of disease, fermentation, decomposition, etc., but it is only by investigations made during the past 20 years that most of the knowledge we now possess on this subject has been gained. Conspicuous among those who have labored in this field stand the names of Louis Pasteur and Dr. Koch, although much has been learned from the researches of Cohn, Rayer and Davaine, Loeffler, Toussaint Chauveau, Buchner, Klebs, Tommasi Crudeli, William Budd, Watson Cheyne, Bilroth, Ehrlich, Lukomsky, Klein, Vandyke, Carter Luginbuehl, Oertel, Hansen, and many others.

Bacteria have been discovered by different observers associated with the following affections, and have in some of them been satisfactorily demonstrated to be their cause, anthrax, pyæmia, septicæmia, osteo-myelitis, malignant œdema, erysipelas, glanders, relapsing fever, typhoid fever, variola, cow-pox, and sheep-pox, virus, measles, diphtheria, malarial fever, syphilis, gonorrhœa, endocarditis, croupous pneumonia, pertussis, trachoma, pterygium, tuberculosis, and some others.

Recently Pasteur has discovered a micro-organism in hydrophobia and by attenuating the germs and inoculating dogs with them has rendered the latter insusceptible to the influence of the most potent rabic virus.

From these facts the existence of a cholera germ would seem to be very probable, and accordingly we find that for forty years back search has been made for it. Bohm, in 1838, found cryptogamic bodies like ferment fungi in the dejecta and intestines. Brittan, Swayne, and Hughes Bennet found micro-organisms in the Bristol epidemic of 1849. Vibrios were discovered by Pouchet and cercomonas by Davaine; and Paccini in 1854 and 1856 discovered bacteria in connection with this disease. Dr. Bristowe, in 1866, seems to have approached nearest to the discovery of the cholera bacillus; he found a curved bacillus, but the cessation of the epidemic rendered further study of the germ impossible. McCarthy & Dove found motile elements.

Researches have also been made in this direction by Hallier, Klob & Thorm, Debary, Cohn, Cunningham and Lewis. Dr. J. C. Peters, New York states in the *Medical Record* that Dr. Dundas Thompson and Dr. Hassal discovered vibrios in 1854, and in 1872 Dr. Nedwetsky found bacteria in the rice-water discharges, and in experimenting with them found out of a great many drugs only tannin, chlorine water and dilute sulphuric, hydrochloric and nitric acids were capable of destroying them.

No other theory of cholera or other infectious disease would so fully explain all their characteristic features as the doctrine that they depend on distinct species of micro-organisms, which has been advocated so long by the ablest writers on the ætiology of disease. The recognised power the virus has of multiplying itself within and outside the body, the fact that it develops only when organic nutriment is furnished, and requires heat, moisture and oxygen, and the deleterious influence of cold, high temperatures and drugs inimical to plant life; the power the poison has of retaining its virulence on fumilis, etc., after long intervals; the fact that the poison of each infectious disease has distinct characteristic actions upon the system, which are uniformly maintained, although in varying degrees; the period of incubation; self-limitation and definite duration, can only be clearly explained by the theory that the cause is a living organism, each disease having a distinct species of parasite. The fact, already fully demonstrated, that some infectious diseases are produced by parasitic plants, would seem to place the matter beyond theory and to be a very strong argument in favor of the view that all are likely to own a similar cause, hence an important field of bacterioscopic enquiry opens up: the discovery of the germ belonging to each affection and the study of its peculiar characteristics, what circumstances and agents favor its development, and what hinders. In this way we may hope that, in the near future, the treatment of these affections will be removed from the empiricism which has hitherto prevailed, and a rational, scientific system of therapeutics pointed out.

As yet the agents found to be destructive to these bacteria outside the body would, in the strength required, be fatal to the patient if administered as remedies. The discoverer of a remedy which will arrest the development of bacteria in the system, and at the same time be innocuous to the host, will confer a boon on humanity that will place his name among those of the highest rank of human benefactors.

John Tyndall, in his introduction to the life and labors of Louis Pasteur, written recently by the latter's son-in-law, and translated by Lady Claud Hamilton, states in reference to this subject: "never before during the long period of its history did a day like the present dawn upon the science and art of medicine; indeed previous to the discoveries of recent time medicine was not a science but a collection of empirical rules depending for this interpretation and application upon the sagacity of the physician." "A great scientific theory has never been accepted without opposition. The theory of gravitation, the theory of undulation, the theory of evolution, the dynamical theory of heat, all had to push their way through conflict to victory, and so it has been with the germ theory of communicable diseases." Where the mind of genius discerns the distant truth which it pursues the mind not so gifted discerns nothing, but the extravagance which it avoids.

Bacteriology will doubtless soon become a part of the regular curriculum of medical studies. In Germany the Government last year summoned to Berlin medical men from various parts of the empire to study the method of Koch and others for investigating bacteria and micro-organisms, and other countries will doubtless soon follow in this line of advancement.

All believers in the germ theory were filled with hope when it was announced that Dr. Robert Koch, chief of the German Scientific Commission for the Investigation of Cholera, had gone to Calcutta to investigate the supposed cholera germ. His brilliant discovery of the bacillus tuberculosis, in 1882, had already caused him in the estimation of the scientific world to be regarded as the most eminent and reliable living bacteriologist.

In his report of January, 1884, he announced the discovery of a bacillus occurring invariably in the cholera discharges and intestinal contents, and also in the intestinal mucous membrane, but not in the stomach.

The lower part of the ileum was the chief seat of the bacilli. When Peyer's patches were reddened he found a considerable invasion of bacteria occurring partly within the tubular glands, partly between the epithelium and basement membrane, and in some parts deeper still. The bacilli were found most abundantly in acute cases, in later stages they

were replaced by bacteria of decomposition, disappearing with the return of fecal discharges and entirely absent when death resulted from the sequelæ of cholera.

He could not find this bacillus in healthy persons nor in any other affections, even in such allied ailments as diarrhœa, dyssentery, etc. He found the same bacilli in a water tank which was supposed to have spread the disease. These tanks supply the water used for bathing, drinking and laundry purposes, the linen of the first cholera patient was washed in the tank, and out of the two or three hundred people living around it and using the water, seventeen died. He could not find the bacillus in any other tanks, and no cholera existed near any of them. When the bacilli disappeared from the water of the tank around which cholera prevailed the epidemic ceased.

The bacilli were curved like commas, and were sometimes joine . together, appearing like the letter S, hence he thinks they may be spirilli rather than bacilli. They are very mobile, and occur in colonies of wavy masses. By cultivating them he learned that they thrive best at a temperature between 30° C. (86° F.) and 40° C. (104° F.), but their growth is not prevented by lower temperatures until 17° C. or 16° C. (60 4-5° F.) is reached. He exposed them to a temperature of—10° C., thus freezing them, but they would afterwards grow in gelatine. They required oxygen for their growth, but being deprived of it did not kill them. They grew with exceptional rapidity, the growth quickly attaining its maximum and after a brief stationary period as quickly terminating. They grew luxuriantly on linen or soil moistened with choleraic discharges, quickly outnumbering all other bacteria present, but after two or three days the bacteria of putrefaction would replace them. An acid condition of the medium in which they were cultivated checks their growth.

In regard to the influence of drugs upon them he found that 1 part of iodine in 40,000 had no effect on their growth, 1 part of alcohol in 10 was the least proportion that had any influence upon them, 2 per cent. solution of sulphate of iron, which will arrest putrefaction, did not affect the comma bacillus, nor did 2 per cent. solution of common salt,—a greater strength than those could not well be used for internal administration. Alum 1 in 100 prevents their growth, and so does camphor 1 in 300, carbolic acid 1 in 2,500, quinine 1 in 5,000, and corrosive sublimate 1 in 100,000. But these proportions place their administration beyond the range of practical therapeutics.

An important point is the fact that drying the bacilli for an hour or so readily destroys them. Hence he doubts if they ever pass into a resting-state. He cultivated them for six weeks and no spores were formed, but they may yet be discovered. Infected clothing or earth, when subjected to drying for 24 hours and upwards, were completely disinfected.

Koch had not been able to produce cholera in animals by inoculating with the comma bacillus, but two Swiss phys icians, Drs. Reitsch and Nicati, at Marseilles last year succeeded in doing so, by placing the virus in the intestines below the stomach, and Dr. Koch subsequently confirmed these experiments. Guinea pigs dying with symptoms of cholera in 12 hours after being inoculated with an attenuated virus. The bacilli are usually destroyed in the stomach, but when this organ is deranged and the food partially digested, the bacilli may pass to the intestines, where they immediately begin to multiply. The symptoms which follow are supposed to be caused by the action of a specific poisonous substance produced by the bacilli. The cells of the mucous membrane are destroyed and the watery portion of the blood is poured out at the seat of the irritation.

The fact that the bacilli are soon destroyed by drying would favor the view that the poison of cholera is usually conveyed thro ugh fluids or damp clothing and not by the atmosphere. Dr. Koch says it is not proved, and doubtless never has occurred, that cholera has been transmitted by letters. The rapid development and decline of the bacilli would seem to accord with the brevity of an attack of cholera and the comparatively short duration of a cholera epidemic; and no pores being formed also accords with the fact that cholera does not usually reappear in the year following an epidemic.

The invariable occurrence of the comma bacillus in connection with cholera suggests a means of at once recognizing its presence by an appeal to the microscope, and the cultivation of the bacilli, and thus in doubful case, valuable time might be gained for adopting measures towards checking the spread of the disease, and if recognized in individuals appropriate treatment might be employed in the earliest stages when only, as a rule, it is likely to be successful.

In regard to treatment, the discovery of the bacillus has not as yet pointed to any resource not hitherto amply tested. In the early stages opium is undoubtedly the sheet-anchor, although the manner in which it affects the bacillus is not yet understood, and as the mineral acids and camphor are inimical to the growth of the bacilli these may be added, and together with spirits of chloroform and some of the essential antiseptic oils, as cajeput cinnamon, peppermint would seem to be an appro- priate treatment. Cold checks the growth, hence heat and friction should be applied to the extremities, and ice to the abdomen, and the free use of ice-water draughts acidulated with sulphuric, nitric hydrochloric acids or liq. acidi phosphori should be allowed. The bacilli are said to be in the intestines only, and not in the blood, hence if the mucous surface could be flushed by the free use of such drinks benefit should be obtained from their specific action in addition to the advantages gained from their astringent effect.

As the bacilli are destroyed by drying and by high temperature, the employment of dry heat is thus suggested as the best means for destroying them. Dr. Koch found corrosive sublimate the most efficient destroyer of germs, although, according to Miquel, it is only one-third as powerful an antiseptic as the bin. iodide.

As the bacilli are found chiefly in the intestinal discharges, their complete destruction by burning or disinfection would prevent the spread of the disease, and as their growth outside the body depends on the presence of organic matter the entire removal from about dwellings of all organic refuse matter, and absolute cleanliness of house and person, and keeping cholera dejecta out of the sewers, would be efficient preventative measures.

Koch's discovery of comma bacillus and his conclusion, strengthened bythe results of subsequent investigation in Egypt and Toulon, that it is the cause of cholera has, led to considerable controversy, and has during the past year agitated the scientific world more than any other subject. His opponents cite such alleged facts as the fol lowing in opposition to his views. Thus Drs. Finkler and Prior of Bonn, and Klein and Gibbes, London, claim to have discovered the comma bacillus in sporadic cholera, and the latter found it also in dysentery, phthisis and in the mouth. Dr. Deneke, of the Hygienic Institute, Gottingen, has found a comma-shaped organism in stale cheese. W. D. Muhler discovered a bacillus in the saliva, which Dr. Lewis believes to be identical with Koch's bacillus. The reply to these objections, by Dr. Koch, Mr. Watson Cheyne and Dr. Heron, London, Dr. Van Ermengen, Belgium, and other investigators, is that morphological criteria alone are not sufficient to show that the bacilli are identical. Their physiological characters must be similar. Under cultivation the mode of vegetation and the colonies, etc., of the above are quite different from the cholera bacillus, hence they are distinct species.

Dr. Emmerich, of Munich, who was sent to Italy by the Bavarian Government, supported by Buchner, claims to have discovered a bacillus in the blood and internal organs, which he believes to be the true cholera bacillus, and M. Strauss and Roux, of the French cholera commission, who, in their investigations at Toulon last year, found the comma bacillus—the result of their researches in the main coinciding with those of Dr. Koch—also claimed to have discovered a bacillus in the blood. But Dr. Koch points out that in healthy blood, besides red and white corpuscles, there exists in varying numbers small, roundish pale elements, the so-called "bloodplates"; in some febrile diseases they are greatly increased, and are often mistaken for bacteria. Ignorance of this fact led the French commission to conclude as they did.

At the meeting of the Royal Medical and Chirurgical Society of London, held on March 24th and 31st last, cholera was the subject for debate. Drs. Klein and Gibbes, of the English cholera commission, who were sent to India to study the relation of the comma bacillus to cholera, arrived at conclusions mostly adverse to those of Koch. Yet they do not deny having found Koch's bacillus in all cases examined, but they are inclined to look upon them as a post-mortem occurrence, and they could not produce any effect by inoculation, but Koch himself, the ablest experimenter living, failed also in his first attempts. Dr. Klein held views previously in regard to cholera which he could not well maintain if Koch's conclusions are correct, hence he was undoubtedly somewhat prejudiced when entering upon these investigations. He claimed also to have discovered a straight bacillus in greater abundance than the curved, and they are observed in the specimens I received recently from Germany through Mr. T. Heinrich, Baltimore, which you are invited to examine this evening.

Mr. Watson Cheyne, in reply, said that much misconception appears to have arisen from the adoption of the phrase "comma-shaped," for it appears that the curving is but an incident of one stage in the life of the bacillus. It is at one time straight, then curved, and sometimes spiral, but, whatever its morphological change is, it exhibits invariably the same actions and characters on cultivation.

Mr. Macnamara, an eminent authority on cholera, agreed with Mr. Cheyne's statement, that what was known of the properties of cholera contagium 20 years ago corresponds with those now recognized as belonging to the comma bacillus and he has found in practice that the most appropriate treatment for cholera is that which is most obnoxious to the bacillus. Hence he accepts fully Koch's conclusions.

It is generally conceded that the results obtained by the investigations of the English Cholera Commission have, on the whole, rather confirmed Koch's views than otherwise, and the crucial test to which his doctrine has been subjected in the keen criticisms of this body of pre-eminently scientific plysicians has not in the least weakened the position assumed in its promulgation. The value of this discovery is beyond estimation. For centuries vague and diverse views have prevailed regarding the cause of cholera, and the means adopted for staying its ravages have been as varied as the theories entertained. No satisfactory solution of the problem had hitherto been made, and it has remained for the acute intellect of the year 1884 to reveal the pernicious offender, and we may hope that further investigations will, in the near future, point out the best means of combating its destructive effects. Dr. Austin Flint in a recent communication in the New York *Medical Journal* on the parasitic doctrine of epidemic cholera, fully accepts the conclusions of Koch, and believes that: "We are entering upon a revolutionary period in the progress of medicine. Hereafter this present period will be cited as the commencement of an important era in medical history. The progressive advancement of our knowledge of the causes of infectious diseases will revolutionize not only ætiology and pathology but therapeutics."

From the last journals we learn that several physicians in Barcelona inoculated themselves with an attenuated cholera virus, which gave rise to a mild affection; a repetition of the experiment nine days after had no effect. Rabbits inoculated were not affected subsequently by double the dose which was found to be fatal to unprotected individuals. Later in Valencia, Spain, Dr. Ferran has inoculated over 6000 persons, some having died, the Spanish Government have prohibited further inoculations, and appointed a commission of enquiry who are now at work. As the comma bacillus has not been discovered in the blood it will be interesting to learn the method adopted by him, and what measure of protection it has afforded, if any. The principle of securing immunity against infectious diseases by inoculation with an attenuated virus may yet prove to be one of general application, but whether its adoption could become practicable is among the problems of the future.

GYNÆCOLOGICAL REPORT.

By E. H. TRENHOLME, M.D., Professor Gyn. B. C.

Ruptured Perineum.—This subject has been occupying the attention of Prof. Carstens, of Detroit Medical College, and we are indebted to him for some very important facts connected with the successful treatment of a freshly-ruptured perineum. It is well known that failure not unfrequently follows the operation when made upon the patient immediately after her accouchment. Dr. C. has observed that this failure is due to the infiltrated state of the tissues, which rapidly subsides, and leaves the sutures loose and allows the edges to separate. To overcome this difficulty the writer waits for 24 hours before introducing the sutures, and then secures the silver sutures by a compressed shot, having previously placed some 5 or 6 shots on the wire. Each day he tightens the ligature and clamps the last shot, thus securing perfect coaptation till union has taken place.

PRECOCIOUS MENSTRUATION, ETC.

Dr. Gautier, in the *Medical Abstract* for Feb., of this year, gives some interesting facts connected with hemorrhages from the genital organs in very young girls. Genital hemorrhage, he states, is not unfrequently met with in new-born children between the 1st and 9th days, generally, however, between 3rd and 6th day. The flow commences as a mucous discharge which becomes bloody, though the amount escaping (seldom exceeding 3 ii. ss.) does not weaken the child or

induce those blood changes which follow internal hemorrhages.

The cause of the hemorrhage is probably due to a catarrhal congestion of the vessels of the mucous membrane of the vulva and vagina which goes on to hemorrhage as in catarrhs of other mucous membranes.

As to treatment, having carefully examined the condition of the anus, bladder, intestines and urethra to ascertain the cause of the hemorrhage. When found to be due to enfeebled health, our attention should be directed to building up the child's health by good food, fresh air, etc., while at the same time the vulva is kept scrupulously clean, and the vagina syringed out whenever accumulations of blood or mucus exist.

Dr. G. gives the statistics of 24 cases of precocious menstruation apart from premature corporal development; of these cases 5 occurred during the first year, some of them during the first 7 days of life, the balance of the cases are about equally divided between the second year and the seventh year. In all his cases the flow was periodical and generally preceded by regular catamenial phenomena, without, however, the development of the breasts or hair over the pubes.

This form of hemorrhage is not regarded by Dr. G. as having any connection whatever with ovulation.

The Dr. then gives notes of 41 cases where there was precocious menstration with other signs of puberty; of these 41 cases 19 were met with in the 1st year of life; 9 in the 2nd year; 11 between the 2nd and 6th years. Some of these became pregnant at the 8th and 9th year. One child menstruated at the 9th month, but never became pregnant, and another case where menstruation began at 2½ years of age, became pregnant 9 times. One case where menstruation began at 2 years of age became pregnant at 8, but ceased to grow then, and never conceived again.

The author points out the fact, which it is well to bear in mind, that hemorrhage from the genitals is frequently due to tumors of these parts *e.g.*, vegetations or polypi of vagina or sarcomata. The uterus is seldom affected, while the ovaries are often diseased. These genital hemorrhages (*i. e.*, due to tumors of the genitals) seldom interfere with the regularity or amount of the menstrual flux.

Ovarian tumors, when of a dermoid nature' retard or prevent menstruation, but if of a sarcomatous nature often are accompanied by the regular uterine hemorrhages associated with precocious development of the internal and external genital organs and hypertrophy of the mammary gland.

Progress of Science.

PNEUMONIA IN YOUNG CHILDREN.

By. L. EMMETT HOLT, M.D., Attend. Phys. to Children's Dep. of Northwestern Dispensary, New York, Instructor in N. Y. Polyclinic.

In a paper published in the *Medical Record*, Feb. 14 and 21, 1885.—Dr. Holt uses the terms lobar and broncho-pneumonia, instead of croupous and catarrhal, or lobular, to designate the two varieties; while broncho-pneumonia is the form essentially peculiar to early life, the lobar variety occurs often enough to demand a portion of our consideration.

Regarding the *seat of the disease*, the order of frequency is, first, the right apex, second, the left apex; third, the left base; fourth, the right base.

Physical signs.—Generally speaking, these do not differ essentially from those in the adult. The subcrepitant râle, is more frequent than the crepitant; in fact, the latter I have rarely heard.

It is extremely difficult, well-nigh impossible in an infant, to examine the supra- and infra-clavicular and the high axillary regions satisfactorily and thoroughly with the naked ear.

Diagnosis—Although in most cases this is easy, it presents in some very great difficulty during the first two or three days before positive signs of consolidation appear.

Practically I have found lobar pneumonia difficult to distinguish from scarlet fever, typhoid, meningitis, tonsillitis, malarial fever, pulmonary congestion, and broncho-pneumonia.

The invasion of pneumonia and scarlet fever are very similar. We must wait for the physical signs of the one or the rash of the other before pronouncing a positive opinion.

The cerebral symptoms of pneumonia are rarely so intense, so prolonged, so continuous, or so progressive as those of meningitis, although almost every individual symptom of the one may be present in the other.

The onset of malarial fever and pneumonia are very similar; both usually begin abruptly with vomiting, convulsions, or a chill; in both we have the sudden rise of temperature to from 103° to 105° F.

BRONCHO-PNEUMONIA.

By this term I understand an inflammation which affects the mucous membrane and the walls of the bronchi, the air-cells, and the interstitial tissue of the lung. The bronchial element predominates, in fact, forms the characteristic feature.

All the latest writers upon the pathology of this disease agree that we can no longer draw the line between broncho-pneumonia and that condition formerly described as capillary bronchitis.

The terms are used synonymously. This form is spoken of as generalized, diffuse, or disseminated pneumonia.

The sexes in broncho-pneumonia are about equally affected.

The clinical picture presented by broncho-pneumonia is a decided contrast to the lobar form in most of the prominent features. It is nearly always secondary; attacks children debilitated by previous disease; its onset is gradual; it rarely terminates by a crisis, and has no typical course.

When it supervenes upon an attack of bronchitis it may be so gradually that it is difficult to tell exactly when the extension took place.

Physical signs—It is upon *auscultation* that we must mainly rely in the diagnosis of this disease.

The sibilant râle is usually the first sign in the the generalized or "suffocative" cases. Vesicular breathing may be almost absent from the obstruction in the bronchi. These râles, when thus generalized, are replaced in a day or two by mucous clicks and moist râles of all sizes equally diffused. These may be the only signs during life.

Absence of vesicular breathing does not always mean hepatization. It may be due to great obstruction in the bronchi with collapse of the air-cells, or to congestion. Pure bronchial breathing, such as is heard in lobar pneumonia, does not usually exist. When it does it is combined with other signs which are found in that disease.

When a consolidated area exists in one lung the transmission of the sounds to the opposite side may be so distinct as to lead to the supposition of disease there. Percussion usually enables us to correct this mistake. In all cases the signs vary greatly from day to day, changing with the depth of the respiration, the position of the child, etc. Repeated examinations are always necessary before pronouncing positively in regard to the condition of the lungs.

How does broncho-pneumonia terminate?—Of the fatal cases the vast majority die during the acute stage. Of those who survive this period by far the greater number resolve in from three to four weeks where consolidated areas of considerable extent have been formed. In these it is necessarily much slower than in lobar pneumonia, where the inflammatory products are wholly or chiefly within the alveoli and the bronchi.

What becomes of those cases (by no means few in number) which at the end of six weeks or two months have shown little or no tendency to resolve, the physical signs remaining as they were during the height of the disease. Three answers may be given: (1.) They may become tubercular. (2.) They may terminate in chronic fibroid induration. (3.) They may recover perfectly.

First, then, in regard to *tuberculosis.* Is it common for a simple broncho-pneumonia to terminate in tuberculosis. We may, I think, safely take the ground that a case of unresolved broncho-pneumonia is extremely unlikely to develop tuberculosis, if there has been beforehand no sufficient grounds for believing the patient to be tubercular.

Secondly, fibroid induration.—The greater the duration of the disease the more marked are the changes, and the acute process may pass into a chronic one, with the production of new connective tissue. These patients may live on indefinitely.

Thirdly, complete recovery.—I use the word in a clinical sense, not in an anatomical one. By recovery I understand a condition in which the lung performs its functions normally, so far as we can judge from the patient's symptoms.

That it is possible for a lung in which consolidation from broncho-pneumonia has existed for several months to return to a condition in which no changes would be apparent under the microscope, I doubt very much. Using the term in the sense defined, I believe that the greater number of these cases ultimately recover perfectly.

Diagnosis.—Is it possible to make a diagnosis between lobar and broncho-pneumonia, and, if possible, is this of any practical value? I answer both these questions in the affirmative. In the matter of prognosis it is of very great importance.

In the vast majority of cases, the two diseases can be distinguished by the symptoms and physical signs.

Treatment.—I have not much faith in drugs in the management of pneumonia in children. I have tried most of those usually recommended very extensively, and am able to speak quite positively of what they do *not* do. Quinine and the other cinchona alkaloids, I believe, have little effect in aborting the disease, shortening its course, or in reducing the temperature.

Aconite in the very beginning of lobar pneumonia I have used considerably in very small frequent doses, and I have seen enough benefit from it to encourage me to continue in its use.

The treatment I have finally settled upon can be briefly summarized in a few words: ***nourishment, opium, alcohol, local applications.***

If the child be at the breast it should be kept there, care being taken that it be not nursed too frequently.

Opium I believe to be worth more in acute pneumonia than all other drugs combined. It quiets the restlessness, relieves the pain and the cough, and perhaps more important than all, sustains the nervous system under the strain which the disease produces, and in this way seems to exercise a beneficial effect upon the inflammatory process. Of late I have used a great deal, and have come to prefer the tincture of opium and ipecac, or the liquid Dover's powder to any other preparation of opium; it may be given in drop doses at the same intervals.

Alcoholic stimulants in a large number of cases of lobar pneumonia are never needed. In broncho-pneumonia they are often required from the outset. They should be given fearlessly, but of course intelligently.

Local applications.—Poultices, unless *very carefully, intelligently,* and *conscientiously* applied are capable of doing quite as much harm as good.

Their efficiency is much increased by the addition of mustard.

To promote resolution in broncho-pneumonia in addition to the usual internal remedies employed, cod-liver oil, iron, etc., I have been in the habit of keeping up a mild counter-irritation over the chest by iodine or friction with some stimulating liniment.

A LINIMENT FOR EARACHE.

Pavesi recommends a liniment composed of camphorated chloral 2½ parts, pure glycerine 16½ parts, and oil of sweet almonds 10 parts. This is to be well mixed and preserved in an hermetically closed bottle. A pledget of very soft cotton is to be soaked in the liniment and then introduced as far as possible into the affected ear, two applications being made daily. Frictions may also be made each day with the preparation behind the ear. It is claimed that the pain is almost immediately relieved, and even in many cases the inflammation is subdued.

INDUCTION OF PREMATURE LABOR.,

By T. Gallard Thomas, M.D.,

Prof. of Gynæcology, Coll Phys. and Surgs., New York.

From a lecture published inthe *Med. ad Surg. Reporter,* Feb. 14, 1885, we abstract the following:—The method of inducing premature labor which I now invariably adopt is very simple, and, at the same time, a perfectly efficient one. The patient is placed across the bed, with the buttocks resting near the edge, and under her is arranged a large piece of rubber or oil-cloth in such a way as to drain into a tub below on the floor. In this tub we put one or two gallons of water of a temperature of 98° F. The operator stands between the thighs of the patient, whose knees should be properly supported and employing a syringe with a long nozzle, which is carried up as far into the cervical canal as it will go, he keeps a steady stream directly against the membranes.

In the course of ten minutes the os will be the size of a silver half dollar, and when dilatation to this extent has been accomplished, he is to insert a gum catheter between the membranes and the uterine walls. The patient is then put in bed, and that is all.

This operation constitutes one of the greatest advances that have ever been made in the obstetric art, and it is certainly no mean triumph to be able thus to preserve a human life which, without its aid, would have been inevitably lost. I can point to at least two dozen children in this city, who by this means were saved from an untimely fate. When the infant has been delivered before full term, it should not be washed and otherwise treated in the ordinary manner of nurses, but should be carefully wrapped in warm cotton and allowed to remain in it; the temperature of the room in the meanwhile being brought up to nearly one hundred degrees.

ON THE TREATMENT OF THE GRAVER FORMS OF ACUTE BRONCHITIS.

By I. Burney Yeo, M.D., F.R.C.P., Physician to King's College Hospital.

We will next consider the treatment most appropriate to the graver forms of acute bronchitis: to those cases in which the catarrhal inflammation is diffused over a great extent of the bronchial mucous membrane, and affects not only the larger tubes, but those also of medium size, and sometimes even the smallest ramifications. Such cases when they occur, even in vigorous adults, are very grave and require most careful management: but when they occur, as they often do, in young children or in old and feeble persons, they are attended with the greatest danger.

When the finer bronchial tubes become attacked and their calibre is diminished by the inflammatory swelling of their lining membrane, and when many of them become blocked up by the accumulation in them of viscid secretion, you can readily understand how imminent must be the danger of death by apnœa. Let us ask ourselves what are the objects we have in view in the treatment of such cases? They are these:—(1) To diminish the inflammatory hyperæmia and swelling of the bronchial mucous membrane. (2) To thin and liquify the catarrhal secretion when it is dry and scanty. (3) To lessen it when excessive. (4) To promote its expulsion from the air passages and so obviate their obstruction. (5) To allay excessive sensibility of the bronchial mucous membrane. (6) To maintain and promote the circulation in the lung, and prevent pulmonary venous engorgement and distension of the right side of the heart. (7) To reduce fever and maintain the general strength.

The several details of treatment by which these indications may be carried out will have to be modified and adapted to individual cases. Much will necessarily depend on the age and vigor of the patient, as well as on the stage which the disease has reached when it first comes under treatment. Remedies most appropriate in the

earliest stage, and in a young and vigorous adult, might be altogether unsuited to more advanced sages, to a young child, or to an old and feeble person.

We will first consider the treatment of a severe attack of acute bronchitis in a young and robust adult seen at its onset. As in milder cases the patient's room must be kept at an equable temperature of about 65°, and the air of the apartment must be kept moist and unirritating by the free diffusion through it of the vapor water. If there is much oppression of breathing, and a sense of dryness and pain referred to the upper part of the sternum, the withdrawal of a little blood by means of a half-a-dozen leeches applied over the sternum will be a judicious measure, and with this may be associated dry cupping over the back of the chest and in the interscapular region. This measure will constantly afford much relief in robust persons when the dyspnœa and sense of oppression are severe. In most cases it will be advisable to apply large linseed and mustard poultices over the front and back and chest; and when the skin is too tender to allow of furthur counter-irritation, a hot jacket-poultice of linseed meal must be used instead.

Of internal remedies I am quite of Stoke's opinion that "there is no remedy that possesses such a decided power over acute bronchitis" as tartarised antimony; but its success depends much on its early administration: when the bronchial mucous membrane is dry and tumid, and before secretion has become abundant, and when the skin is hot and dry, and the pulse hard and frequent. It should be given in small repeatd doses, combined with other diaphoretics and with opium.

Warm alcoholic drinks must be given to keep up the force of the circulation, while, at the same time, they favor diaphoresis, reduce fever, and promote expectoration. Two or three ounces of hot milk or whey, with an equal quantity of seltzer or soda water, and a tablespoonful of brandy or whiskey should be given every three or four hours.

Free evacuation of the bowels should be regularly obtained so as to favor the descent of the diaphragm, and afford as complete expansion of the lungs in breathing as possible; and by unloading the portal system of veins, any tendency to distension of the right side of the heart is to that extent relieved.

It is necessary to insist strongly on the importance of using the greatest discretion in the administration of opium in these cases of severe diffused acute bronchial catarrh. The more diffused the catarrh, the more cautious must we be in the administration of opium. In old people and in young children opium is scarcely admissible, and even in adults, where there is much obstruction to the entrance of air into the lungs from the abundance of secretion in the air passages, opium is a very dangerous remedy. The effect of opium is to check cough and diminish secretion; the former it does by lessening the sensitiveness of the bronchial membrane, and the latter by modifying the capillary circulation in it. But in cases of "suffocative" bronchitis, while we might desire to diminish the secretion, we dare not deaden the sensitiveness of the bronchial mucous membrane, or do anything to check the cough. We depend upon the cough to clear and set free the obstructed air passages, and we only desire to make it more efficient to this end.

It is extremely important to bear this in mind with regard to the use of opium in bronchial catarrh; a dose of opium given injudiciously may produce a fatal somnolency, quiet the cough, and block up the air passages. If you give opium at all in such cases, give it only in very small doses, and only when the patient is watched by some thoroughly trustworthy person; but never give it at night to produce sleep, however trying the cough may be, or however urgent the patient or the attendant may be for a sedative.

Remember that opium is rarely ever admissible in the severe diffuse bronchial catarrhs of old persons and young children. When it is very necessary to secure a few hours' sleep, it is better to give from 5 to 20 grains of chloral, with an equal quantity of bromide of potassium or sodium. —*Medical Times and Gazette.*

WHO OWNS THE PRESCRIPTION?

This question has been asked so many times that it is now in order to set it at rest forever. The Supreme Courts of Massachusetts and of New York have ruled as follows:

"The question before the Court seems to be very simple, indeed. A patient applies to a physician and receives from him certain advice, for which he tenders a fee. The physician hands a piece of paper to the patient, purporting to be a *written order* for certain goods, called drugs, which order is filled by a merchant or apothecary. The payment of the fee, and the delivery of the goods, or drugs, terminates the verbal contract, and the druggist keeps the prescription as evidence that the *contract* has been fulfilled, as far as he is concerned. The druggist can, if he so *please*, on his own responsibility, renew the drugs, for he is but a merchant, and has a *perfect right* to sell drugs to any one and in any shape. He need not keep the prescription, nor is he bound to give a copy, but, should error occur, he has no protection in case of suit."

From this it would appear that a prescription is but an order for drugs, and the delivery of the drugs *settles the matter.*

ARTIFICIAL SEA AIR.

Many, indeed, are the luxuries that the magician's wand of invention now brings into the midst of our homes. As an instance, to produce a sea atmosphere for the sick room, a foreign contemporary suggests the use of a solution of peroxide of hydrogen (10 volumes strength) containing 1 per cent. of azonic ether, iodine to saturation, and 2.50 per cent. of sea salt. The solution placed in a steam or hand spray diffuser can be distributed in the finest spray in the sick room at the rate of two fluid ounces in a quarter of an hour. It communicates a pleasant sea odor, and is probably the best purifier of the air of the sick room ever used. It is a powerful disinfectant, the same author writes, as well as deodorizer, acting briskly on ozonized test solutions and papers. It might be well to test the subject in some ward of one of our hospitals.—*Scientific American.*

PILOCARPIN IN ERYSIPELAS.

During a recent lecture, Prof. J. M. Da Costa called the attention of the class to a new method of treating erysipelas by hypodermic injections of pilocarpin. This method, though new to the profession, has been used at various times during the last five years by Prof. Da Costa with good results. In the case presented before the class the action had been marvelous. The patient was admitted to the hospital two days before with a rapidly developing erysipelatous inflammation, due to a bruise received the previous night in a political altercation. His eyes were completely closed, his face was much swollen, red, and burning, and his temperature 102.8°. In addition, he had slept out all night exposed to the weather, and had evidently imbibed a superabundance of alcohol. It seemed to Prof. Da Costa that the chloride of iron treatment would be too slow in a case of this kind, so rapid in its progress, especially as it was one of the type in which cerebral complications are liable to occur. He accordingly ordered pilocarpin gr. 1-6, to be injected hypodermically. The result was more gratifying than had even been anticipated. In a short time profuse sweating had begun, which had lasted for an hour and a half. During the sweating the temperature fell to 99°. The further development of the inflammation was stopped. The effusion rapidly subsided, and when the patient appeared before the class there was not a trace of the disease left.—*Med. World.*

A PRACTICAL POINT IN THE TREATMENT OF PLEURAL EFFUSIONS.

Dr. Broadbent (*Lancet*), in a clinical lecture, says that when he hears a distinct bronchial breathing generally over the chest in cases of pleural effusions, he feels sure that a consolidated lung is immersed in the fluid, and he consequently does not tap unless the symptoms are so urgent as to demand interference. A solidified lung cannot, of course, expand as does one which is simply collapsed or even compressed, unless it is bound down by adhesions; and experience has shown him that on the resolution of the pneumonia the fluid is usually rapidly absorbed.

He seems to hold the sound views that with grave symptoms a pleural effusion should be withdrawn, whatever the complication; that the course of moderate effusion may often be shortened by tapping; but that, if the lung be consolidated—one evidence of which is the persistence of bronchial respiration over a whole or a large part of the chest—it is better to wait, if the condition of the patient warrants such a course.—*Boston Medical and Surgical Journal.*

THE TREATMENT OF SICK-HEADACHE.

Dr. W. Gill Wylie, of New York, has produced excellent results with the following method of treatment: So soon as the first pain is felt, the patient is to take a pill, or capsule, containing one grain of inspissated ox-gall and one drop of oil of gaultheria, every hour until relief is felt, or until six have been taken. Dr. Wylie states that sick-headache as such is almost invariably cut short by this plan, although some pain of a neuralgic character remains in a few cases.—*N. Y. Med. Journal.*

ASTHMA.

Dr. Faulkner (Pittsburg) treats the paroxysms of asthma successfully by the application of tincture of iodine along the course of each pneumogastric nerve in the neck.—*Col. and Clin. Record.*

ABSENCE OF VAGINA, UTERUS, AND OVARIES IN AN APPARENTLY WELL-BUILT WOMAN.

In the *New York Med. Jour.* Dr. Henry J. Garrigues reports an abstract in this case. He publishes the case because it was usually said that there should be some signs pointing to such a condition in the appearance of the patient; especially that there should be a weakly, imperfect general development, absence of the mammæ, &c., but in this case there were absolutely no such signs. Even on examining the external genital organs one would have supposed the patient to be quite normally developped; it was only on searching for the vagiua that he discovered the condition described.

The case was also interesting as showing the manner of natural development of the vagina and uterus. One point which had puzzled him a little was the history of the monthly molimen, for he had been unable to find any trace of ovaries. The

patient, however, had some headache and general malaise almost constantly, and we could easily imagine that these symptoms might be increased a little every month.

The question might arise whether he was warranted in telling the patient that nothing could be done for her. Of course, if a uterus had been found, the treatment would have been to make an artificial vagina; but would it be proper to make an artificial vagina for the sole purpose of coition? He thought not; the woman would be exposed to much danger thereby. The operation itself would be dangerous, and the act of copulation in this artificial canal would expose her to constant danger.—*Med. & Surg. Reporter.*

[In this case the woman was no doubt better built than her clinical history. A woman with all the outward characteristics of her sex, but without ovaries, uterus, or vagina is a specimen heretofore unheard of. Were this case exactly as represented in the above history the views of gynæcologists regarding the relations of the sexual organs to the general organization would require to be modified. We may, however, be permitted to say that because Dr. Garrigues did not find the ovaries in a woman without a vagina is not sufficient proof that these organs did not exist.].—A.J

CHOLERA INFANTUM.

Dr. J. Lewis Smith (*N. E. Med. Monthly*): ℞. Tinct. opii, gtt. xvj.; Spts. ammon. aromat., ʒ ss. to j.; Bismuth subnitrat, ʒ ij.; Syr. simplic. ʒ ss.; Mistur. cretæ. ℥ iss. M. Sig.—One teaspoonful every two or three hours to a child of eight to twelve months, until vomiting and diarrhœa are controlled.

CHOLERA VACCINATION.

We find in *La Independencia Medica* of Barcelona, of March 1 and 11, 1885, the details of some interesting experiments by Dr. Ferran relating to the personal prevention of cholera. Dr. Ferran has been making a very exhaustive study into the natural history of the comma bacillus, and it is claimed for him, by Dr. Serenana and others of his disciples, that he has followed this microbe through all the phases of its existence, and has found it in certain periods of its evolution under forms never before described. But he has also been experimenting in the direction of the attenuation of the virus of cholera, in order, by inoculation with it, to produce a modified form of the disease which shall secure immunity for the subject from the graver scourge. It cannot be asserted that this object has as yet been obtained, nevertheless the results thus far observed are by no means such as to make the learned naturalist despair of success.

The first to submit himself to this somewhat hazardous experiment was Dr. Serenana, who, on February 23d of the present year, received an injection into each arm of half a cubic centimetre of the attenuated virus. In less than three hours, he states, he began to experience severe pain in the posterior region of the arms, which gradually increased and rendered movement of the limbs difficult. At the end of seven hours he had a slight chill, accompanied by a feeling of general languor, elevation of temperature, rapid pulse insomnia and headache. This condition remained for a little more than twenty-four hours, when there was a rapid abatement of all the symptoms, both local and general. Dr. Jacques was the second to receive the virus, and although he was injected in one arm only with half a cubic centimetre, his symptoms were even more pronounced than those of the first experimenter, and he also had slight cramps and nausea. Dr. Bertram, of Rubio, likewise submitted to the injection and experienced similar effects. An examination of the blood eighteen hours after inoculation, revealed the presence of micrococci, said by Farran to be the first form assumed by the comma bacillus when injected into the living organism.

At the expiration of nine days two of these persons submitted to a re-inoculation with negative results, while four others, who received primary inoculations with the same attenuated virus at this time, suffered from symptoms of considerable intensity. About two hours after the inoculation pain was felt in the arms, and toward evening, the injection having been practiced shortly before noon, the temperature rose, the pulse increased in frequency, there were headache, languor, slight chills, and nause. Later there was a rapid fall of temperature, and the hands and feet grew cold and presented a marbled appearance. At the same time the headache and nause increased and were accompanied by complete anorexia. Some of the subjects had also slight cramps in the calves of the legs. In about forty-eight hours all these symptoms had passed away. The highest temperature recorded was 102° F., and the pulse 125.

It must be confessed that these phenomena bear considerable resemblance to those of Asiatic cholera, and they are the more remarkable when it is remembered that an injection of the same virus, in identical dose, produced absolutely no results in two individuals who had been inoculated some days previously. These experiments must of coure be repeated many times, and in the presence of an actual epidemic of cholera, before they can be accepted as in any degree conclusive. But, if the cable reports truly, the disease has already reappeared in Spain, and Dr. Ferran will now have an opportunity to put his experiments to the crucial test. In the presence of the unsatisfactory state of cholera therapeutics we can but hope, faintly though it may be, that a second Jenner has arisen in Spain, and that we may yet see cholera relegated to the position of small-pox, as no longer a scourge to be dreaded by civilized communities. —*N. Y. Med. Record.*

A METHOD OF AVERTING SYNCOPE.

It is well that we should always be prepared to avert what may or may not prove to be a serious, or even fatal syncope. In persons whose hearts are weak, fainting or syncope is not at all uncommon, and may be produced by very slight causes. Hence we reproduce the concluding paragraph from an article on the subject by Dr. William J. Notley, in the *Lancet*, March 14, 1885:

"Now, in all cases where the syncope is not complete, and where the heart continues to act, though feebly, measures are taken to restore the patient by adopting such means as are calculated to strengthen the action of the heart and facilitate the flow of blood to the brain. In many cases a person accustomed to faint from slight causes will able to avert the syncope by adopting such means, and it is for this purpose that I wish to draw attention to the efficacy of heat applied to the head. In a person with a weak heart, syncope may be produced by simply sitting with the feet in hot water, and in like manner, it may be averted by application of heat to the head. Any one my convince himself of this by first producing faintnes in himself artificially. This may easily by done by getting into a bath of about 110° F. In a few minutes he will begin to feel faint. Let him then plunge the whole of his head except the nose and mouth beneath the surface of the water, and in less time than it has taken to bring on the faintness all the disagreable sensations will cease, and he will now be able to continue in the bath, perhaps for half an hour longer, without any inconvenience. From this it would appear that the application of heat to the head is a measure of some value in averting a threatened attack of syncope."—*Med. and Surg. Reporter.*

A NEW PROCEDURE FOR THE GOITRE.

Dr. Weiss, of Meiningen, publishes, in the *Berliner Klin. Wochenschrift*, his results of the employment of a new method for the cure of goitre, of which the following is a brief account:

The growth is lightly touched with an awl-shaped Poquelin burner which is heated to a white heat. The application is made by tracing horizontal lines from right to left, beginning above about one centimetre apart; under this another row of lines made about three centimetres long, until is the entire tumor is covered. The burnt points are soon covered by a crust, and in the course of six days there is nothing remaining but a red cicatrix. The procedure, when the burner is heated to a white heat is not very painful, since it is carried out so rapidly. Few patients refuse the application without ether, even the employment of a local anæsthetic is superflous. The after-treatment is quite simple, a layer of cotton may be placed over the tumor to hinder the cloth ing from irritating. In the course of six to eight days the operation may be repeated until the tumor has disappeared. The rapidity with which this occurs is largely dependent on the size, nature and age of the tumor. It may have to be repeated from six to twelve or more times. In certain cases the conjoined administration of small doses of iodide of potassium seems to hasten the success, but in reality it is not required, since the author reports some cases where the smallest doses of the drug caused rhinitis, while the final result, nevertheless, was good. The procedure proved to be most efficient in simple endemic goitre, while the cystic growth required a longer time to disappear. In the latter class of cases Weiss is not yet prepared to say positively whether the cure was complete, since his data are too recent. If the physiological action for this treatment is asked for the only explanation that can be given at present is the suggestion that the irritation causes a contraction of the muscle walls of the vessels, which cuts off the nutrition to the hypertrophied glandular substance, which causes a gradual disappearance of the tumor. In cases even where the growth was covered by a network of enlarged veins the results of this kind of treatment was marked and rapid. Weiss has not had an opportunity of applying this method in varicose veins, but he has no doubt but what the method will bring about a rapid contraction of the much dilated vessels.

THE TREATMENT OF RINGWORM.

Alder Smith, M.B. (*British Medical Journal*), gives the following: I desire now to call attention to a treatment for recent ringworm, where it does not extend over any large extent of surface. It is not a new remedy by any means, but, I believe, a new way of naming a well-known parasiticide. I have been trying for some time to find out what vehicle penetrates most deeply in the hair follicles, and think it is chloroform. Chrysophanic acid is a very good parasiticide and, though it is insoluble in spirit and ether, yet it is soluble in chloroform. Chloroform also dissolves the fatty matter out of the hair follicles, and thus allows the parasiticide dissolved in it to penetrate deeply. During the last year I have used a solution of seven grains of the acid to the ounce of chloroform to all cases of recent ringworm, and believe it is the most efficient treatment I have yet tried. The small patches should be carefully marked out by cutting the hair very closely on them and the chloroform solution should be well pressed and dabbed into the places with a minute sponge-mop for five minutes, two or three times a day, according to the amount of irritation produced. The aim of the treatment is not to produce scabs, but to get the solution to penetrate deeply. The sponge-mop should not be much larger than a big pea, and should be continually dipped into the chloroform bottle, as the solution soon evaporates, whilst it is pressed into the dis-

eased spot, and leaves the yellow acid dry on the place. Great care must be taken that the solution does not run on to the forehead or into the eyes, and that the person using it does not inhale the vapor. I always give full directions about the care necessary in using such a potent remedy; and only employ it to weak places of the disease. It is well for the nurse to keep her face away from the sponge, and to use the chloroform in a current of air, and not in a small room. The places should be well washed every morning with hot water and soap, to remove any sebaceous matter or crusts, and the hair should be kept closely cut on them till the new hair appears, which is generally in about two or three months, but the remedy should be continued till all the diseased stumps have come out.

EXTERNAL APPLICATIONS OF ETHER FOR VOMITING.

The *Paris Medical* credits Dr. Galcedan with this suggestion. In a case of obstinate vomiting during pregnancy, after every remedy had been tried in vain, he applied some either directly to the skin of the epigastrium. The effect was surprising; the patient inspired deeply several times, and ceased vomiting at once. Whatever may be the explanation of its action, this mode of treatment is certainly worth an extended trial.—*Medical Herald.*

INCONTINENCE OF URINE.

In a lecture on diseases of children, published in the *Medical Press and Circular*, Robert Lee, M.D., draws a distinct line between that form of urine which occurs in the night and that which occurs in the daytime. He says Trousseau first pointed this out, and showed that belladona acted promptly when the incontinence occurred at night, and not so well where the trouble persisted through the day. In these cases there is a partial paralysis of the sphincter, and strychnine gives the best results.—*Louisville Med. News.*

ERGOT IN THE TREATMENT OF COUGH.

Dr. Allan (*British Med Journal*) reports fifty cases of pulmonary affections in which cough was a distressing symptom. He generally employed subcutaneous injections of ergotin. The dose is not mentioned. In most instances signal relief was obtained.—*N Y. Medical Journal.*

A NEW REMEDY FOR DIPHTHERIA.

It is to Germany that we are indebted for this efficacious and simple treatment, which consists of large doses of oleum terebinthinæ rectificatum. Different writers have highly extolled it, and ascribe to it actions which seem almost miraculous.

It would appear that scarcely half an hour after its administration a bright scarlet tint begins to encircle the diphtheritic exudation, gradually increasing in size, at length it completely envelopes and replaces the false membrane.

Authors, who have been liberal in their praise, affirm that within twenty-four hours after the ingestion of the remedy the disease has wholly disappeared, leaving hardly a trace.

The treatment, however, seems to be attended by such marvelous success and promptness of effect only when the disease is in the first stages; nevertheless, even after the disease has existed for several days, it exerts, though not as promptly, a decided curative action, and hastens the ultimate recovery. The dose, which is best given immediately after meals and in a little warm milk, ranges from a teaspoonful for children to a tablespoonful for adults, morning and evening.—*Journal de Thérap.*

A VALUABLE REMEDY FOR HEADACHE.

We desire to call attention to a simple, and at the same time wonderfully efficient, treatment for many kinds of headache. We lay no claims to originality, nor do we know who the originator was, but having used it for a year or more, and in many cases with remarkable results, we feel disposed to give it our indorsement, and desire to make it more generally known. The remedy is nothing more nor less than a solution of the bisulphide of carbon. A wide-mouth glass-stoppered bottle is half filled with cotton or fine sponge and upon this two or three drachms of the solution are poured. When occasion for its use occurs the mouth of the bottle is to be applied to the temple or as near as possible to the seat of pain, so closely that none of the volatile vapor may escape, and retained there four or five minutes or longer. For a minute or so nothing is felt, then comes a sense of tingling, which in a few minutes — three or four usually—becomes rather severe, but which subsides almost immediately if the bottle be removed, and any redness of the skin that may occur will also quickly subside. It may be reapplied, if necessary, several times in the day, and it generally acts like magic, giving immediate relief.

We believe this was the basis of a once popular nostrum. The class of headaches to which it seems especially adapted is that which may be grouped under the broad term of "nervous." Thus neuralgic, periodic and hysterial headaches are almost invariably relieved by it. True, the relief of a mere symptom is quite another thing from the removal of its cause, yet no one who has seen the distress and even agony caused by severe and frequently recurring headaches (and who has not ?)but will rejoice to be able to afford relief in so prompt and simple a manner, besides it is sure to secure the hearty gratitude of the patient

if he has suffered long. As to the *modus operandi* we have nothing more definite than a theory to offer, and that is that the vapor being absorbed through the skin produces a sedative effect upon the superficial nerves of the part to which it is applied. We know by experiment that its influence is not due to its power as a counter-irritant. We however know that it does act, and if we do not clearly see in what way it acts that it is no more than can be said of several other remedies which are firmly established in professional favor and confidence.—*Physicians and Surgeons' Investigator.*

INGROWING TOE-NAIL. DEFINITION.

A chronic, painful, traumatic inflammation of the tissues at the margin of a toe-nail. The inflamation is usually attended with the formation of granulations and with suppuration, and it is nearly always of the great toe nail, usually on its outer side. There is a form of so-called in-growing toe-nail which is not attended with suppuration, but is dependent on an accumulation of epidermic scales between the nail and the flesh; and very rarely the disease may exist in one or other of the lesser toes.

CAUSATION.—In civilized countries, we must alwa ys recognize the element of compression, or at least prevention of expansion inside a boot. It is perfectly conceivable that the condition might exist in individuals who never wear boots, but for practical purposes we must take the boots for granted. They are a constant concomitant and, if not a prime, are probably a contributing, cause. It is however, a cause which we cannot remove. We must treat the toe inside the boots. Indeed, the patient will probably have removed the cause long before we see him. Looking beyond the boots, we find that the causes may be arranged as intrinsic, or depending on peculiarities in the toe or nail, and extrinsic, or dependent on the direction of the toes or the condition of outlying structures in the foot.

1. INTRINSIC, *i.e.*, in the nail, or in the surrounding tissues, or in both.

1. *In the nail.* In some people, the nails in the fingers and toes—and I have noticed that the peculiarity is usually coincident—are convex or arched, and lie dip deeply into the surrounding flesh. In such cases, in paring the nail of the great toe, it is difficult to carry the knife or scissors completely round, and thus there is frequently left behind a small spicule or pointed piece, which readily insinuates itself into the neighboring flesh. Matters are sometimes made worse by pulling at this piece, "tearing it to the quick." The flesh swells and conceals this small piece of outlying nail; it is overlooked, sets up irritation, and the condition is developed.

2. *In the flesh.* Some people have a redundance of flesh in their toes, and their fingers as well. In these the flesh overlaps the nail, and in the foot the confinement of the boot, added to the soddening perspiration under the overlapping flesh, readily starts the condition. Once started it continues, and suppuration along the margin of such a toe may continue for years. Fortunately, it is the least painful, and most easily treated of all the varieties.

3. *In both nail and flesh.* The existence of both the above conditions—an arched toe-nail and an excess of soft tissue—will frequently be found associated with the malady. Alone, or in combination with extrinsic causes, this double condition, with the mere wearing of boots, is almost enough to cause this complaint. In this case, also, it is not likely to be severe.

2. EXTRINSIC, or from causes lying outside the nail and its surrounding tissues.

1. *Flattening of the arch of the foot.* Flatfoot, in varying degrees, I believe to be the most important cause of in-growing toe-nail. and all the more so that the ordinary modes of treatment are futile to cure it. It acts in this way through the attempt of the point of the great toe to become the anterior pillar of the arch of the foot—the natural support of the latter, viz., the pad at the root of the toes, particularly of the great toe, not being available on account of relaxation and perhaps painfulness of the plantar ligaments. But constant use of the toe in this wise induces hypertrophy of its tissues and consequent overlapping of the toe-nail. By easily understood stages this hypertrophy becomes irritation, inflammation, and suppuration where the flesh is crowded over the edges of the nail, and we thus get the condition fully developed.

It is simple flat-foot, pes planus, and not splay-foot, or pes valgus, which is most likely to start the mischief. And it has seemed to me that not the worst cases of flat foot—those which require operation—but the moderate cases, which require no special treatment for the flattening, are chiefly associated with in-growing nail.

2. *Eversion of the great toe.* The production of this condition, I believe, will be most frequently found to depend either on a habit of walking with the limb much rotated outwards, or on a congenital deflection of the toe itself. This too great proximity may merge into a passing beyond, and then we have the second toe, perhaps with the third, overriding the great toe, and evidently causing the complaint.

3. *Inversion of the lesser toes.* In this case the same result as the preceding is produced by a deviation inwards of the second and third toes. How it is produced I do not know.

TREATMENT I.—1 Where the cause is intrinsic and resident in the nail alone, it may usually be remedied by careful attention to the "toilet" of the nail, using a knife rather than a scissors, and cutting from behind forwards obliquely, so as to give the nail a pointed shape. By this means, the leaving behind of sharp portions at the margin which are insinuated into the flesh is rendered less likely. If the granulations are exuberant I

would recommend the application of a crystal or two of chromic acid, which leaves a hard, dry scab, under which the sore heals kindly. Careful trimming of the nail will usually ward off the complaint in future.

Where the cause lies in a superabundance of flesh in the toe, a condition which is usually accompanied with thin, tender skin, which perspires and chafes readily, I believe the best plan to be:

First, the application of chromic acid, if necessary, and thereafter pressure, either by strapping or by elastic. Every night the affected toe is to be surrounded tightly from the tip upwards by thin strips of adhesive plaster taken out of boiling water. This may be removed in the morning and replaced by an india-rubber cap, such as is worn over a sore finger during a *post mortem* examination. The toe is thus rendered and kept anæmic by compression; congestion is removed, and the tissues get more firm and resisting in the course of a few months.

In such cases I have sometimes noticed that the feet perspire freely, and then the wearing of fine worsted socks, the nightly use of a foot-bath, into which enough sulphuric acid has been poured to make the skin tingle, and sprinkling some powered boracic acid over the foot every morning will expedite the cure.

3. When there is a combination of malformed nail and overgrowth of flesh, a judicious combination of the methods just described will probably effect a cure. Here, if anywhere, a scraping of the nail, making it thin and yielding, ought to do good; but I am doubtful of the utility of this procedure. The nail is too firmly bound down to the matrix to yield much to lateral pressure, and constant scraping, I think, has a tendency to develop an irritative hypertrophy of the nail itself. If all these or similar plans fail there is nothing for it but removal of the nail in the manner to be described presently.

II.—1. Of intrinsic cases by far the most important is flattening of the arch of the foot, and unless this cause is clearly recognized and successfully met, our treatment will almost certainly fail. To restore the arch of the foot, probably the most scientific treatment would be to make the patient recline on his back for some weeks, and permit the stretched plantar ligaments to regain their tone. In actual practice it will be found a very efficient plan to wear a small pad of several thicknesses of chamois leather or flannel under the ball of the great toe. This pad may be put on every morning and retained in position by a collar of thread or elastic carried round the root of the great toe. The toe, thus elevated beyond the reach of harm and relieved from its illegitimate labor, soon regains its normal condition. After a few months the pad may be gradually given up, and, with care, the condition need not recur.

2. When the cause is eversion of the great toe, from whatever cause arising, the treatment is by no means easy. What I have found most satisfactory is a pad between the great and second toes, stopping short of the sore part. The pad may be constructed of severat layers of flannel or chamois, and is kept in position by two collars round the root of the great and second toes respectively.

3. I have seen only three cases of the second and third toes overlapping the first, and causing in growing of its nail. In these the condition was easily remedied by wearing a double band of tape, so arranged as to keep the two offending toes turned outwards and pushed downwards. The tape was fixed in a loop round the fourth toe, passing double over the second aud third toes, and then surrounded the great toe. The little apparatus is easily made by the patient.

So much for the scientific treatment of the complaint. But there is a class of cases, chiefly among hospital patients, in which imperfect intelligence and want of cleanliness nullify our efforts. Such patients have usually flat-foot, but they want to get well at once and permanently, and the endless worry of the morning pad is beyond their endurance. For all these, I remove the matrix as well as the nail, and scrape the periosteum off the bone. The operation is certain to cure permanently every case of the disease; it is a simple one, and by the exercise of a little dexterity, may be done on both feet while the patient is under the influence of nitrous oxide gas. The knife grazing the bone is carried rapidly round the flesh on the right side of the nail, and by a change of the same movement, passes under the nail down to the bone, and lifts away nail, matrix, and suppurating flesh. A piece of boracic lint is wrapped tightly round the toe, and need not be removed for a week. In the meantime the patient may get about. At the end of a week the sore will be smaller than the nail removed, for the healthy tissues have been pressed inwards over the sore In three weeks the wound is cicatrized over, and. most likely in a few weeks more a stunted nail is developed like that usually seen on the fifth toe, from which no trouble ever arises.

If the patient is not anxious to have a hand some nail on his toe, I never hesitate to let him have this mode of cure. The loss of a toe-nail, at its best, can never be a great one; and when it is ingrowing its loss is a gain.

I confidently recommend the procedure as far preferable to mere avulsion of the toe-nail, a plan of treatment which, in my opinion, ought to be abolished from surgery.—J. Greig Smith, *British Medico-Chirurgical Journal.*

NOTES ON ASTHMA.

BY ROBERT SAUNDBY, M.D.

It is to be regretted that the term Asthma is not always restricted to that form of paroxysmal

dyspnœa, which, not being associated with any organic changes in the thoracic organs, has been rightly ascribed to nervous influences. It is to this form of asthma alone that I intend to allude. Its prominent clinical features have been graphically portrayed by Trousseau; "an individual in perfect health goes to bed feeling as well as usual, and drops off quietly to sleep, but after an hour or two he is suddenly awakened by a most distressing attack of dyspnœa. He feels as though his chest were constricted and compressed, and has a sense of considerable distress; he breathes with difficulty, and his inspiration is accompanied by a laryngo-tracheal whistling sound. The dyspnœa and sense of anxiety increasing, he sits up, rests on his hands, with his arms put back, while his face is turgid, occasionally livid, red, or bluish, his eyes prominent, and his skin bedewed with perspiration. He is soon obliged to jump off his bed, and if the room in which he sleeps be not very lofty, he hastens to throw open his window in search of air. Fresh air, playing freely about him, relieves him. Yet the fit lasts one or two hours or more, and then terminates. The face recovers its natural complexion and ceases to be turgid. The urine was at first clear and passed rather frequently, now diminishes in quantity, becomes redder, and sometimes deposits a sediment. At last the patient lies down and again falls off to sleep." But these attacks are not always so transient: there are frequently some prodromata, such as a feeling of tightness at the chest for some time previous to an attack, and still more frequently there is difficulty of breathing on the following day with perhaps cough and mucous expectoration. This consecutive bronchial catarrh tends to increase, and the subjects of it often acquire a definite degree of bronchitis which may continue, especially in the winter, and is liable to be aggravated from time to time by fresh paroxysms; the following is a case in point: H. H., æt. 40, at first suffered from asthma only during the months of July and August but during the last few years he has been liable to attacks all the year round. He has recently suffered from a good deal of bronchitis in the winter. (see p. 185 *Med. Abs.*, 1884).

Such cases present the appearance of ordinary chronic bronchitis, and unless the history is inquired into the asthma would be considered to be the result of this. Such a mistake would be very unfortunate, as by overlooking the nervous element in the case, we run the risk of omitting that part of the treatment most likely to be effectual in relieving the patient's sufferings. But in typical cases the attacks present all the characteristics of a neurosis. They occur in a person in otherwise good health, and pass off in a few hours without leaving anything but the recollection of the disturbance behind. During the paroxysm, physical examination fails to detect any sufficient cause for the dyspnœa in the lungs themselves into which air enters freely. The true hindrance to the respiratory act is in the impossibility of expiration. The muscles of inspiration, especialy the diaphragm are spasmodically contracted, and it appears to be now satisfactorily decided that this phenomenon is the true cause of the asthmatic paroxysm. We owe this discovery to Riegel of Cologne, the author of the article on Bronchial Asthma in Ziemssen's Cyclopedia. In a recent communication he has shown that the occurrence of the paroxysm depends entirely on the influence of the phrenic nerves, which supply the diaphragm. While he confirms the statements of Williams, Paul Bert, and others, who induced convulsive dyspnœa in dogs by stimulating the vagus, he shows that when both vagi are divided the paroxysms may be produced by stimulating their centrifugal ends, while if the phrenics are divided the occurrence of the paroxysms is entirely prevented.

This serves to finally sweep away the old and always unsatisfactory theory that the dyspnœa was caused by contraction of the circular muscular fibres of the bronchi; a theory which never sufficed to explain the clinical phenomena, or corresponded with known pathological data.

The mechanism of the paroxysm being clearly established we are quite able to see how any irritant acting upon the surface of the respiratory mucous membrane may determine an attack, but it is still impossible to define the peculiar forms of irritation that can produce this disorder, still less to detect the constitutional predisposition which renders persons liable to it. For it must be at once admitted that all people who inhale hay pollen do not get hay asthma, nor do ipecacuanha powder or ordinary dust cause such attacks in persons generally, as in some specially susceptible individuals. Among the more remarkable and less common causes is the odor of flowers. Trousseau himself being susceptible to the smell of violets; and the odor of animals, especially cats! The constitutional predisposition was connected by Trousseau with gout, yet in only one of many cases of which I have notes, is there any history of this disease. Undoubtedly the predisposition is transmitted by descent, but owing to the loose way in which the word "asthma" is used we cannot attach much importance to statements to this effect made by patients. For my part, I am inclined to regard asthma as one of the rarer and major manifestations of the neurotic temperament; and I believe that it is a disorder which is yearly increasing in frequency.

Recently, I saw a young woman complaining of a persistent cold in the head, violent coryza, sneezing, and slight cough. She had asthmatic paroxysms at night, though from the slight degree of prominence given them by her in her complaints to me, we may infer that they were not very severe. Her father had suffered from "hay fever" and gout, while a paternal aunt was subject to true asthma. The exciting cause in this case appeared to be the dust from furs amongst which she was employed.

This association of coryza with asthma is most commonly seen in hay fever. The most common manifestation resembles a severe cold in the head, and the asthmatic paroxysm occurs less commonly. Doubtless both cases owe their origin to the same cause, the action of some irritant upon specially sensitive mucous surfaces. Trousseau supposed this form of coryza to be a minor manifestation of the asthmatic tendency, a sort of *petit mal* in the subjects of which you might anticipate, sooner or later, the occurrence of the major attack. Dr. Morell Mackenzie has recently drawn attention to a form of coryza very frequent in America, and which he attributes to the fine white impalpable dust which he says is so constantly present and so little regarded, in the atmosphere of a great part of the United States. Hay fever, also, is so common in the same country that there exists an American Hay Fever Association, made up of sufferers from this complaint, which meets annually to compare therapeutic observations!

I have met with several instances of this liability to severe coryza, apart from the effects of external cold, and the subjects were in every case neurotic dyspeptic persons. Now this type is, we are told, most widely spread throughout the United States, so that indeed neurasthenia is called the American disease. I am therefore inclined to believe that the liability to this form of coryza is one of the expressions of neurasthenia, and that given the presence of this condition, the exciting causes are numerous and almost omnipresent; doubtless the dust referred to by Dr. Morell Mackenzie being one.

As neurasthenia is undoubtedly on the increase in this country these considerations are not unimportant. I fear, from what I see in practice, that it is a disease not generally recognised, and with which there is too little sympathy. It is not sufficiently known that the most eminent persons are the most prone to this condition; that we find it specially amongst our intellectual classes, our statesmen, authors, teachers and the like. Such men have usually done far more than their share of work of all kinds, and have been the very life of the organisations with which they have been connected.

One of my most recent examples was a vice-president of his ward committee, many years its secretary, and foreman in his factory: a man who, left early an orphan, had worked his way up to the highest rank in his own class. Surely such men deserve something better from the profession than to be relegated to the class of incurable chronic dyspepsias, and drugged alternately with brom. pot. and rhubarb and soda, as brain or stomach respectively show signs of distress. Given such a case, every rational practitioner will see his way to devising a mode of life by which the sufferer may bring his work, diet, and exercise within the limits of a nervous system, weakened by excessive and constant use.

Climate, season, and locality play an important though obscure part in determining the incidence of asthmatic attacks. The hay-pollen theory explains the cases which are better in the town than in the country, and in the winter than in summer; but it does not explain the cases in which the reverse of this is true, or such examples as that of the twin brothers mentioned by Trousseau, who, being natives of Marseilles, could not live there on account of their asthma, yet got rid of it easily by crossing to Toulon, and never suffered from it in Paris. I know a lad who spends part of his time every year at four different houses; at two of these, in London and Wales, he is liable to attacks, while at the other two he is always free. Low-lying localities seem generally unfavorable to asthmatics, but nothing is more capricious than this disorder, exactly opposite conditions apparently suiting different cases; the city suits one, the country another; winter brings relief to this sufferer, summer to that one; fog and smoke confine one man to his bedroom, while to another they are indifferent, and to a third smoke may be positively beneficial.

The *intervals* during which the sufferer enjoys immunity vary very much. In some the paroxysms occur every night, in others at intervals of a few weeks, sometimes months may intervene. One of my patients went for two years free from an attack, without being able to assign any cause for the respite. These peculiarities are strictly parallel to the capriciousness in other respects already alluded to; and, like them, cannot receive at present any satisfactory explanation.

Is there any drug that wards off the attacks Belladonna, arsenic, lobelia, and *iodide potassium*, have each found supporters. I have given a sufficient trial to all of these, and the only one in which I have any confidence is iod. pot. Its value in this disorder has been long known, but it is not so generally appreciated as it should be. The dose required is large, ten grains three time a day, or the same amount in two doses of 15 grains each. Another drug, which certainly appears to be of use, is *sulphur*, the *balsam pectoris* of the celebrated Hoffmann. This may be given in doses of 10 or 20 grains in syrup or honey, once or twice daily.

The importance of counter-irritation is well insisted upon by Dr. Graves, he recommended the application of the linimentum terebinthinæ aceticum to the nape of the neck and the upper part of the chest and back. Some years ago I was struck by the results recorded by Dr. Faulkner, from the use of pigmentum iodi painted over the course of the pneumo-gastric nerves. In several cases I have seen this plan of essential service, and can recommend it though it has not proved in my hands a radical means of cure. The man H. H. who was suffering very much from dyspnœa used the iodine paint and reported that he had slept all night for the first time in 12 months.

As to the *modus operandi* of this procedure we may conceive that vigorous stimulation in the cervical region would be very likely to have some

effect upon the phrenic nerve; and if we accept the most recent views, that the spasm is mainly due to contraction of the diaphragm under the influence of this nerve, counter-irritation, not necessarily "in the course of the pneumogastric," but in that region, or in the nape of the neck, as Graves suggested, seems a very rational, and proves a very satisfactory method of treating this disorder.

When there is persistent *dyspnœa*. some *bronchitis* and *cough*, a cough mixture must be given, and to the ordinary mixture of squill, senega, and ipecacuanha, I would recommend the addition of 15 drops of the fluid extract of *Grindelia Robusta* (a species of sunflower). This is one of the new American remedies which has fairly stood the test of experience, and has proved a valuable means of relieving dyspnœa.

The value of inhalations of stramonium, nitre, tobacco, etc., has been perfectly well established, and these sufferers are in the habit of seeking such remedies without consulting us. Various articles, cigarettes and pastilles, are commonly advertised. Dr. Sawyer, some little time ago, asked Messrs. Southall to analyze one of the most popular forms of these latter, and they reported it to contain approximately one part each of powdered aniseed and potassium nitrate, and two parts of powdered stramonium leaves. The hypodermic injection of morphia is strongly recommended by Dr. Steavenson, himself a sufferer from asthma, as the most effectual means of relief during the paroxysm. One of my patients who was no doubt dyspeptic, found a great deal of relief from the occasional use of an emetic, while another of his plans for treating himself was to abstain from food entirely for 24 hours.

Constipation may be present, and we may take it as a rule that torpor of the bowels always acts prejudicially on the respiratory tract. I do not think in the present day quite sufficient attention is paid to the value of purgatives in the treatment of disease. It often happens that otherwise well considered treatment fails for want of an associated purge, and in a great many conditions, as in chlorosis, purgation is an absolute essential to the success of the specific remedy employed. Moreover, we leave this matter too much in the hands of our patients and think any laxative will do. This is another very serious mistake; any laxative will not do. Each condition has its appropriate laxative, and in the one we are at present considering sulphur, otherwise indicated, is the best.—*Birm. Med. Rev.*

TREATMENT OE RINGWORM.

Alder Smith (*Brit. Med. Jour., Nov.* 1884) recommends the use of chrysophanic acid dissolved in chloroform, in the proportion of seven grains to the ounce. He says that it is the most efficient treatment that he has yet tried.—*Jonr-Cut. and Ven. Dis.*

THE CANADA MEDICAL RECORD

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SMALL-POX.

For some years past Montreal has been free of small-pox. This fortunate state of freedom from a disease so terrifying might have continued for years to come but for the supineness of our authorities and their refusal to take the first case into the civic hospital. What has been the result. Misery or death to many, hundreds terrified lest they should contract it, and probably thousands prevented from visiting the city on account of the notoriety given to its existence. Judging from the medical officers' reports its spread is gradually increasing, and there is apparently no sign that we shall be free from this scourge for some time to come. The Board of Health confesses itself helpless to prevent its further spread, declares the present *abominable* hospital full, and unable to accommodate any more patients, and obliges the retention in private houses of many cases which would otherwise be quite willing to submit to isolation. So, because the Board does not see its way to expend a few hundred dollars in erecting a cheap shelter on the Hospital ground, dangerous centres must be permitted to remain. At this time of the year, and for a couple of months to come, tents might be erected, with a double cover to keep off the rain, each to contain two beds. The cost would be trifling, but the gain to the patients immense. There would be the best of ventilation, a pure atmosphere, and the period of convalescence

shortened. We recommended this plan to the Board, and thus may, they, do to others what we would prefer doing for ourselves if thus afflicted. We have already suggested in a previous issue that now is the time for our Board of Health to consider the matter in its proper bearing, and have erected pavilions suitable to meet all future contingencies. Surely the money can be afforded unless it is that our aldermen are deficient in patriotism, or that there are no printing contracts to dispose of, in looking after the city's health. All cases of small-pox, no matter who the patient may be, should be completely isolated, and this can only be done by removing them from private houses and contact with persons whose business demands their mixing with the public generally. Seriously, we cannot conscientiously advise any one to go to the present Hospital—we would not go, that is certain, and why? The answer is plain on reflection to any one who will visit its wards. Patients in all the various degrees of malignity are crowded into rooms, each having a much smaller cubic space than is necessary for persons in good health, and each is obliged to breathe the poisonous emanations of others. What, therefore, can be the chances of recovery or thorough convalescence. The Chairman of the Board of Health enjoys the confidence of the Medical Profession, is conversant with the requirements needed, and is thoroughly competent to deal with the matter, so that it might be expected that full authority would be given him to stamp the disease out. We fear, however, that he finds his position no bed of roses, and that too many obstacles are in his way to effect his purpose. There is another aspect to the question. A reasonable man might consider it quite sufficient to have all cases reported to the Board, whose duty it is to placard the house and take every precaution necessary to prevent its spread, and that the health officers' reports would be quite sufficient for the daily newspapers. Reporters, however, do not seem to be very reasonable in their selection of items, for where is the sense in the publicity that has been given to this outbreak? Indeed, if we take as a symptom the morbid matter that is constantly filling the columns of the daily press and feeding the public mind, the indication would appear that the average reader is to a great extent mentally degraded, and that the press, instead of being an educational factor, is merely carrying out the demand for sensational items. We would therefore urge upon the Board the necessity for remodeling this so-called Hospital, and to place it on such a plane that men of all conditions in life may enter its doors with confidence, and ensure safety to their families and the public generally.

SPAYING FOR UTERINE FIBROIDS.

This operation, which was first performed by Dr. Trenholme of this city, has been occupying the attention of the German Gynæcological Society, when Dr. WIEDOW (Freiburg) presented a paper upon the subject. He gave a synopsis of 63 cases which had come under his notice, among which there where twelve deaths.

Prof. Hegar had operated 21 times, with three deaths. One of these fatal cases did well for six months, when renewed bleeding and enlargement of the tumor destroyed life. The remaining 17 cases did well, being followed by cessation of the catamenia. Freud (Strassburg) reported six cases; in all favorable results were obtained, except one, where no benefit ensued. In this case the tumor was of immense size, as in one of the fatal cases operated upon by Hegar. Hegar stated that on the average he regarded the operation as less dangerous than removal of the growth, but sometimes the danger was greater; when he found a good pedicle he prefered ablation when the tumor was large. In small tumors oöphorectomy is, in his opinion, a very effectual operation. Kaltenbach (Gissen) also reported two successful operations, but at the same time stated that the menses had continued in several cases after the removal of the ovaries. HEGAR stated that cystic degeneration of large fibromas occurs even after normal cessation of menses, and the same occurs in cases after the climateric is brought about by the removal of the ovaries. For this reason he regards the prognosis in very large fibromas as doubtful.

This discussion is of great value, as affording data for the selection of cases suitable for oöphorectomy—where the tumor is very large not only is the operation dangerous and difficult, but the after-results are so uncertain that spaying would seldom be a warrantable procedure. In such, not only may cystic degeneration take place, but menstruation may continue and so nullify the result of the operation. In one case of spaying operated upon by Dr. Trenholme the menses have been quite regular and in every respect normal. This has been the case for more than six months. The future of this, one of the grandest of modern operations, would seem, as a rule, to be

limited to these cases where the fibroid is small or of moderate dimensions, and where the climateric is too far off to enable the patient to reach and safely pass that period.

THE MEDICAL SERVICE.

The following table and other information bearing on the sick and wounded volunteers in the North-West has been compiled from reports in the office of the Surgeon-General at Ottawa, and, though somewhat roughly summarized, will serve to show the amount of work entailed upon the surgical staff and the excellent results so far obtained. We are indebted to the courtesy of the Surgeon-General in allowing us the privilege of seeing the reports, and also for much information so cheerfully given at all times.

The following table shows the condition of the occupants of beds at the hospital at Saskatoon on the 30th May under the charge of Dr. James Bell:

Face—
- Comp. fracture of lower jaw.....convalescent.
- Wound of eye and temple. " lost eye.

Chest—
- Wound of right lung.....improving.

Abdomen—
- Wound of left groin.....bullet still in pelvis, doing well.
- Wound of right side.....convalescent.
- Contused wound..... "

Back—
- Wound of left back..... "
- Wound of back and left chest.....empyema, doing well.
- Wound of left back.....doing well.

Scrotum and perineum—
- Wound of testicle.....doing well.
- Wound of thigh, scrotum and testicle (Half-breed).convalescent, but loss of both testicles.

Upper arm—
- Wound of right arm.....convalescent.
- Wound of left arm..... "
- Wound of left shoulder...severe, doing well (since been discharged).
- Amputation of left arm...convalescent.
- Wound of left shoulder..severe, doing well.

Forearm—
- Wound of left forearm...doing well.
- Wound of right elbow...improving slowly.
- Wound of right wrist....convalescent (since been discharged).
- Wound of right forearm..convalescent.

Hand—
- Wound of left hand.....severe—probably lose hand.

Thigh—
- Wound of right thigh....convalescent.
- Wound of left thigh.....doing well.
- Wound of right thigh.... "
- " " ....not doing well, suppurating, but not in danger.
- Wound of left thigh.....doing well.
- " " ..... "
- Comp. frac. of right thigh (Half-breed)..... .....thigh amputated—very low.

Leg—
- Comp. fracture of left tibia.doing well, will probably save leg.
- Wound of right leg.....convalescent.
- " " ..... "

Foot—
- Wound of sole of foot.... "

Large joints—
- Wound of right elbow....doing well, damaged elbow (since d.scharged).
- Wounds of right knee and left leg.....wound of knee serious to limb (since dead).

Miscellaneous—
- Pneumonia..... .....convalescent.
- Acute rheumatism..... "
- " " ..... "
- Flesh wound, left side.... "

Besides the above casualties now under treatment at Saskatoon there have been many others, disposed of as follows:—Face, 1; abdomen, 1; back, 1; upper arm, 7; forearm, 6; hand, 4; thigh, 4; large joints, 1; rheumatism, 3; sciatica, 1; scald, 1—total 30, discharged to base hospital at Moosejaw, May 20th. Face, 1; chest, 1; abdomen, 1; forearm, 1; hand, 1; thigh, 1; rheumatism, 1—total, 7, discharged home. Upper arm, 2; forearm, 1; leg, 1; rheumatism, 2, discharged for duty. Neck, 1; chest, 1; thigh, 1—total 3, died.

At the battle of Cut Knife Hill, fought May 2, 1885, the casualties were:—

Killed, 8—Six being shot through the head, of whom five died in action and the other at Battleford the following day. Two were shot in the body, one dying in action. shot through the chest, and the other at Battleford on the following day.

Wounded 14—One through nose and cheek, severely, requiring removal of cheek bone two weeks subsequently. Two in the neck, both severe, one in back of neck, and in the other the bullet lodged against the spine below the level of spine of scapula, and was extracted May 20th. Two of upper arm, one of a severe flesh wound,

the other a comminuted fracture of neck of humerus, severe, and necessitating removal of a portion of the humerus May 7th. One severe flesh wound of left forearm; one shot in the back, the bullet being removed on the field; one in the right buttock, severe; one in the left side, severe; one in abdomen, bullet not found, severe; three of the thigh, two being superficial and slight, and the other severe; one superficial wound of left calf slight.

The medical staff present on the occasion consisted of Brigade Surgeon Strange of the I. S. Corps and Surgeon Lesslie of the Q.O.R., also an ambulance corps of one Sergeant and eight men of the Q.O.R., with two stretchers.

Of the twenty-six supplemental commissions offered by the British War Office to graduates of the Royal Military College at Kingston, we understand that six will be in the Royal Artillery, ten in the Engineers, and the remainder in Infantry and Cavalry Regiments.

CRANIOTOMY.

The Society of the Holy Inquisition has lately decided, in answer to a question submitted by the Archbishop of Lyons, "That craniotomy does not receive the sanction of the Church, and that in childbirth where one life must be sacrificed the life of the child must be saved, if possible, even at the expense of that of the mother." This has always been the position taken by the clergy of the Roman Catholic Church, but it is so contrary to all human ideas that but few Catholic parents would submit to such a sacrifice. We doubt very much if any intelligent physician would suggest such a course, or assume the responsibility of its performance. Medical teaching and modern public opinion are alike opposed to such mediæval doctrines.

We have received the Forty-second Annual Report of the Montreal Dispensary for the year ending April 30th, 1885. This institution is dependant chiefly upon voluntary contributions for support, but each applicant for relief is expected to give five cents. This plan was adopted by the Board to prevent undue attendance of patients, and as a means of obtaining some return for the benefits bestowed. This plan has worked very well indeed, and might be followed with advantage by other charities, as many of the applicants to such can well afford to pay something. 10,359 applications were attended to during the past year, the average cost of each patient being eleven cents.

THE LATE ALFRED JACKSON, ESQ., M.D., QUEBEC.

We regret to have to record the death of Dr. Jackson, who breathed his last on the 15th July at noon. Deceased was one of the oldest medical men in the city of Quebec. He was professor of midwifery and diseases of women and children in Laval University. He was well-known for the thoroughness of his attainments in medical science, and especially in the particular branches to which his attention was most necessarily directed; and in surgery his standing for more than a quarter of a century has been in the front rank in this part of the Province. Dr. Jackson was born in 1810 at St. Andrew's near Montreal, his father having been Artemus Jackson from Newton, Mass., and for many years a lumber merchant in the city of Quebec, dying about 1847. The family were Loyalists at the time of the war of the American colonies with the Mother Country. Deceased was educated in the city of Three Rivers, Province of Quebec, and in medicine at the University of Edinburgh, being licensed by the Royal College of Surgeons of that city in 1832-33, and returning to Canada the next year. He was one of the originators of the Medical School in Quebec, established several years before Laval University, in which institution he took his present chair, when the medical department was first opened. He was a member of the council of that university, and has been so since it was originated. He was elected member of the Literary and Historical Society of Quebec in 1837. Professor Jackson was for 22 years visiting physician to the Marine and Emigrant Hospital, Quebec, and at the time of his death held a similar connection with the Hotel Dieu Hospital. He was also Government visiting physician to the Beauport Lunatic Asylum. The Doctor was assistant surgeon to the volunteer forces in 1837-38, being in active duty nearly two years. During that exciting political period a great many troops were stationed at Quebec. In 1854 he was named the Government Joint-Commissioner to enquire into the causes leading to the introduction of cholera into Canada during that year, and drew up a long and elaborate report.

The Professor was for twenty-one years one of the Governors of the College of Physicians and Surgeons in this Province, throughout which he is well-known to the medical fraternity. In every respect his character stands high, and he had a great many warm friends. The deceased was married three times, his last wife surviving him.

PERSONAL.

Lt.-Col. D. Bergin, M.P. for Stormont and Cornwall, and Surgeon-General of the Militia, who represents the St. Lawrence and Eastern Division in the Medical Council of Ontario, has been unanimously elected President of that body for the current academic year. This is the second time he has received the distinguished honor at the hands of his colleagues, the last time he occupied the chair being in 1881-82.

Dr. G. T. Orton, M.P., Surgeon of the 90th Battalion, who was Brigade Surgeon with the troops at Batoche, has recently returned to Ottawa, to devote himself to more peaceful duties in the Legislature. His return to the Commons was the signal for an outburst of applause from those present, and the veteran Premier, who was addressing the House at the time on the Mounted Police Augmentation Bill, took the opportunity afforded him by the interruption to welcome his supporter with a neat compliment.

Dr. Corbett, of Ottawa, died recently in Winnipeg. He was attached to the Ambulance Corps of the North-West field force.

Dr. Campbell, Senior Editor of the RECORD, sailed for Europe by the Allan SS. Parisian on the 25th July. He will be absent two months.

Dr. Gaherty has resigned the chair of Anatomy in Bishop's College.

Dr. Gardner has been appointed Professor of Anatomy in Bishop's College.

Dr. Thomas J. Alloway has been appointed Gynæcologist to the Montreal Dispensary.

Dr. J. B. McConnell has been appointed Lecturer on Histology in Bishop's College.

CORRESPONDENCE.

Editor CANADIAN MEDICAL RECORD.

SIR,—The Thirty-Sixth Annual Session of the American Medical Association met at New Orleans on the 28th of April, at the Thulane Hall.

The meeting was called to order by Dr. Samuel Logan, of New Orleans. There were on the platform: Drs. N. S. Davis, nestor of A. M. A., Dr. T. G. Richardson, dean of the Medical Faculty of Louisiana, and others.

The president, Dr. Henry F. Campbell of Augusta, Georgia, then proceeded to deliver his address.

Dr. Brodie moved that a vote of thanks be tendered to Dr. Campbell for his able address, which was unanimously adopted.

Dr. Billings, U. S. A., presented his report on the arrangements for the meeting of the International Medical Congress at Washington, D.C., in 1887. Dr. Shoemaker, of Philadelphia, attacked the action of Dr. Billing's committee, of which he also was a member; he claims that the committee had exceeded its authority, had assumed powers not granted, and that certain members had ignored others, and had bargained with "new code men," and given them representation.

Dr. Billings denied emphatically that there had been any bargain or understanding with "new code men," the latter had nothing to do with the committee, which went to Copenhagen to confer with the International Medical Congress. Dr. Billings recited the history of the organization of the committee of arrangements and defended them from the charges which had been made; he spoke very highly of Dr. R. P. Howard, as one of the vice presidents; in his position, being a Canadian physician, could not be a better one and being well known to the leading professional men of Europe, United States and Canada.

Dr. Daniel, of Texas, offered a series of resolutions providing for raising a new committee to arrange for the Congress. Dr. Saunders of Tennessee moved to approve the action of the committee, as far as it goes, provided they exclude all new code men. Dr. Saunders' resolution was lost. Dr. Kelley's substitute for Dr. Daniel's resolutions was adopted: yeas 131, nays 92. The resolution, as amended, provides for raising a committee, to be composed of members elected from each state, territory and district, representing the army, navy and marine hospital service, which committee shall meet the original committee on the International Congress, and have power to review, alter or amend their action, as they may deem best.

On the third day of its Session, on the section of medicine, cholera and its treatment, by J. H.

Hollister, Chicago, the discussion on this disease was opened by Dr. Austin Flint, of New York, and the subject was discussed by other members, and myself, as a member, participated in the deliberation of the debate, when I arrived at the hall, just after the discussion, which was about to be suspended to make room for special order of the day, consequently the president allowed me half an hour to discuss my views on the cholera, in regard of the presumptious *bacillus* theory, by certain hypotheses of the day, and gave the proper treatment to control the discharges or the flowing of the white viscid secretion from the bowels in that disease.

Yours, etc.,

THIBODEAU, La. JOHN B. C. GAZZO, M.D.

REVIEWS.

The book recently written by Dr. D. W. Cathell, called "The Physician Himself," does not say a word about patients' diseases or their treatment, but does tell how to honorably get patients to treat, and also tells, in a plain business-like manner, what a physician must add to book-learning and college-wisdom in general, to make his success in life more certain, more rapid, and more complete besides telling what course professional tact and business sagacity dictate in almost every possible dilemma. The young and the old, the dull and the wise, will each find in it a feast of practical wisdom, worth many times the price of the book.

It is a large handsomely-bound octavo volume, pica type, green cloth cover, with polished red edges, about which the editor can give further information if desired.

Remit the price, $1.25, either in money or stamps, to the publishers, Cushings & Bailey, 252 W. Baltimore Street, Baltimore, Md., or almost any bookseller in the United States, and you will receive a copy of the latest edition by return mail.

PAMPHLETS RECEIVED.

Harvard University Bulletin for May, 1885. Edited by Justin Winsor, Librarian of the University.

Endometritis Fungosa: Its Pathology and Treatment. By James B. Hunter, M.D. Reprinted from the *Medical Record.*

A Comparative Review of Quarantine and Maritime Sanitation. Excerpted from the New Orleans *Medical and Surgical Journal* for June, 1885.

The Failure of Legislation in Limiting the Spread of Venereal Diseases. By E. W. Allison, M.D., and W. E. Ashton, M.D. Read before the Philadelphia County Society, April 22, 1885.

El Boletin—Medico, Tongillo, Peru, South America.

Epidemic of Typhoid Fever, at Plymouth, Pennsylvania. By Dr. E. O. Shakespeare. Philadelphia County Medical Society.

Insanity and Divorce.—The Neuropathic Conditions and Treatment of Cancer.—Mysomania. By C. H. Hughes, St. Louis, Mo. From the *Alienist and Neurologist.*

Supplement Kansas Law Journal, May 2nd, 1885: Containing the Prohibitory Law, Pharmacy Law, Dentistry Law, and Board of Health Law.

Clinical Notes on Swallowing of the Tongue. By Geo. W. Major, B.A., M.D., Montreal.

Bacterial Pathology: A Series of Papers on the Exhibits at the Biological Laboratory of the Health Exhibition, under the charge of Watson Cheyne. Illustrated.

Specialties and their Relation to the Medical Profession. By L. Duncan Bulkley, A.M., M.D., New York.

Foreign Bodies left in the Abdomen after Laparotomy. By H. P. C. Wilson, A.M., M.D. Reprint Gynecological Transactions, 1884.

Surgical Notes from the Case Book of a General Practitioner. By W. C. Will, M.D., of Sandy Hook, Conn. Reprint *New England Medical Monthly*, Aug., 1885.

Constitutional Treatment of Caries and Necrosis. By H. C. Wyman, M.D., Detroit, Michigan.

History of the Clamp Suture of the late Dr. J. Marion Sims, and why it was abandoned by the Profession. By Nathan Bozeman, M.D., New York. Reprint from Gynecological Transactions, 1884.

Transactions Medical Society of the State of Tennessee, Fifty-second Annual Meeting, 1885.

COLLEGE ANNOUNCEMENTS RECEIVED.

Atlanta Medical College, Atlanta, Georgia, 1885; Dartmouth Medical College, Hanover, N. H., 1885; Medical Department University of Buffalo; Medical College, Charleston, South Carolina; Trinity Medical School, Toronto.

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MEDICO-CHIRURGICAL SOCIETY, MONTREAL.

Stated Meeting, May 1st, 1885.

T. J. ALLOWAY, M.D., 1st Vice-President, in the Chair.

Dr. WM. GARDNER read a paper on a case of tubercular peritonitis with encysted collection of fluid, simulating ovarian cyst.

S.B., æt. 23, unmarried, domestic servant, belonging to a remote country district north of the Ottawa River, who had lived in the city during the previous six months, was sent to me about last midwinter as the suspicion of pregnancy had arisen in consequence of extensive abdominal enlargement. She admitted a pregnancy terminating at six or seven months a year and a half previous. She could give no definite account of the date at or about which the present abdominal enlargement began, but her mistress noticed it three or four months previous. It had rapidly increased since then. The girl complained of abdominal pain; menses had been absent for three or four months; general strength, health and appetite had declined, and she had become emaciated. The tongue was red.

Examination.—The belly much enlarged; the skin below the naval presenting recent pinkish striæ, as well as old silvery streaks. Well-marked fluctuation over the whole of the anterior and antero-lateral aspects of the abdomen. Dullness on percussion over the same area. In the lumbar region (flanks) and epigastrium the bowel note present. No firm or solid part to be felt anywhere. The anterior aspect of the abdomen quite uniform. The perineum slightly lacerated and the posterior vaginal wall partially prolapsed. The uterus, measuring two inches, pressed upwards and forwards, lay immediately behind the pubes. The patient was admitted to the Montreal General Hospital and kept under observation for a few days, when it was found that she had fever of septic type, the temperature at times running very high, with profuse sweating and occasional attacks of vomiting.

Operation.—The ordinary incision for ovariotomy was made, but on reaching the peritoneum no separation of parietal from visceral layer could be made; the knife entered the collection of fluid, passing through what seemed to be a thickened, closely adherent cyst wall. The fluid was amber colored, contained flakes, and in the last portions an obvious admixture of pus. The cyst wall did not collapse as the fluid escaped, but appeared to be adherent everywhere, even to the bottom of the pelvis. Acting on this view, and with the concurrence of my friend Prof. Roddick, who was assisting, I decided to make no attempt at separation of the supposed cyst, but to drain and irrigate as affording the patient the best chance. A large glass tube was passed through the wound into the Douglas pouch, and irrigation practised every two hours, night and day. At first weak carbolized water, then corrosive sublimate solutions, and finally solutions of iodine, were used for this purpose. The general condition at once improved, and this was maintained for a period of ten days. Fever diminished and appetite improved. After

a few days the reflux water during irrigation contained enormous quantities of fibrinous, flaky material. Soon, however, her condition again declined. Temperature ran high; sweats were profuse. The discharge always somewhat fœtid, became more so. Soon after the operation the patient suddenly developed a cough with expectoration, which soon became purulent, and was at times bloody. Three weeks after the operation a large rubber drainage-tube was passed through the Douglas pouch and out by the vagina, being carried a few inches beyond the vulva. This did no good. She gradually sank, and died exhausted six weeks after the operation. Two days before death she complained of sore throat, and on examination the fauces, tonsils and posterior wall of the pharynx were found to be covered with a diphtheritic membrane. Until the autopsy, I adhered to the original diagnosis of suppurating, universally adherent, ovarian cyst. Dr. R. J. B. Howard, acting pathologist to the Hospital, made the autopsy. I append his report:—"On opening abdomen a large globular mass presents, of the size of a man's head, occupying false pelvis; this and the parietes are everywhere covered by a grey, rough membrane about one-eighth of an inch hick. The transverse colon is firmly adherent to the upper surface, and is also bound tightly down to the liver. A collection of pus is found below and by the side of the spleen, and another smaller under left lobe of liver in middle line. The anterior peritoneal cavity is thus converted into a suppurating cyst, extending from liver down into true pelvis, nearly filled by the mass, which is found to consist of all the intestines, except the transverse colon, closely matted together by recent slight adhesions, which are studded with miliary tubercles. The cyst wall is apparently much older than the inter-intestinal adhesions; and looks like an unhealthy granulating membrane. The walls and viscera of true pelvis are covered by the same membrane. The great omentum has quite disappeared; but no doubt has been spread out over the intestines, and formed part of the membrane covering them. All the abdominal viscera adherent to one another and to parietes. Liver fatty; contains a few gray granulations. Kidneys contain a few gray granulations. Lungs universally adherent; abundantly studded with gray granulations. Tonsils and pharynx—surface gray and sloughy-looking. No loss of substance; same appearance involves œsophagus opposite cricoid cartilage, and about four inches lower down."

Dr. MIGNAULT, read a paper on a case of Partial Epilepsy which appeared in the June Number of the Record.

In the discussion which followed, Dr. Henry Howard took exception to the name of the paper, and said that it should be called a mild form of epilepsy. Another form was the marked epilepsy. He knew of a gentleman who has had attacks of this nature for ten years, but is not aware of the fact. He has a momentary loss of consciousness, with slight quivering of the muscles of the face. Another, a lady, has attacks which are not more severe than the aura of an ordinary epilepsy. She suddenly feels a something run up from the foot to the heart, and in a few minutes is perfectly well again. The Italians have been writing much on epilepsy. They show that cortical epilepsy, when the lesion is in the motor area, always is accompanied with convulsions, which begin in the side of the face opposite to the brain lesion. The arm is next affected, then the leg, and last the trunk. When the lesion is in the peripheral or lower centres, then there are no general convulsions. In a pure case of cortical epilepsy, there must be biting of the tongue and relaxation of the sphincters.

Dr. CAMPBELL, who has on several occasions spoken of the great benefit of nitro-glycerine in epilepsy, again mentioned his continued success with it, and related one or two cases where a wonderful change for the better has followed its administration.

Stated Meeting, May 15th, 1885.

T. J. ALLOWAY, M.D., 1st Vice-President, in the Chair.

Atmospheric Materies Morbi.—Dr. HENRY HOWARD read a paper on this subject which appeared in June number of RECORD.

Stated Meeting, May 29th, 1885.

T. J. ALLOWAY, M. D., 1st Vice-President, in the Chair.

Dr. R. J. B. HOWARD exhibited the following pathological specimens:

Atheroma of Aorta—Infarct in Spleen—Granular Kidneys.—The heart showed a moderate degree of calcification of the aortic valves, normal in other respects. Aorta showed very advanced atheroma, there being all degrees from slight yellowish sub-intimal deposit to extensive

calcification of the inner and middle coats; also many spots where the intima had been destroyed, laying bare the middle coat, which was calcified. In one place two of these "atheromatous ulcers" communicated by a passage running under the intima, admitting a pencil. The spleen had a large infarct raising the capsule, marked off from the surrounding tissue by a dense, yellow, fibrinous capsule. The substance of the infarct was of a dull reddish brown color, soft and friable, apparently structureless, and looking like a decomposing blood clot. The kidneys were a little smaller than normal. Cortex shrunken, surface typically granular, surface tough on section.

The patient had a spot of softening in the pons. This specimen was in Dr. Wilkins' possession. The condition of the aorta, etc., was not suspected during life.

Dr. WILKINS said this patient, aged about 73, came to hospital with paresis of the left side, contracted pupils and mental derangement. The muscles of the thumb of the left hand were wasted, the right less so. Five or six days before death, left-sided hemiplegia set in, which could not be accounted for at the time, but which the *post-mortem* made clear. He sliced the brain, getting nothing abnormal till the pons was reached. Here, to the left of the median line, was found a spot of softening the size of a pea, due, no doubt to a piece of fibrin from the aorta or a little plate becoming separated and carried till lodged there.

Malignant Disease of the Uterus.—Dr. HOWARD exhibited this for Dr. Armstrong. The cervix was gone; all the remaining tissues were involved, as were also the parts about the bladder. Both ureters were enormously dilated, from being blocked at the lower end. The pelves also were greatly distended. There were no signs of peritonitis.

Dr. ARMSTRONG said he saw the patient first in the beginning of January. Was sent for on account of excessive metrorrhagia. The case was easily diagnosed, and the chloride of zinc paste applied. A slough formed and came away. She got about till April 1st, when he was again sent for to stop another hemorrhage. The paste was again applied. He was sent for a third time for this trouble last Wednesday, but on arriving she was dead. A late symptom was incontinence of urine from the infiltration about the neck of the bladder and uretha. For the last five or six days no urine came away. She never suffered much. The patient's sister had just recently died of the same disease.

Dr. MCCONNELL then read a paper on "Cholera and the Comma Bacillus." (Published in July No of RECORD.)

Dr. WILKINS said that five or six weeks ago Prof. Billings brought him a test-tube containing the Asiatic cholera germs in a beef-tea and gelatine solution, also one with the cholera morbus germs. From the shaking they received both were liquified, so that their peculiar and very different behaviors could not be observed. The cholera morbus preparation was very fœtid, the other much less so.

Dr. KENNEDY suggested that, as the men about copper works were known to be rarely attacked with cholera, the salts of copper should be tried as a remedy.

Dr. Hy. HOWARD had seen three epidemics—one in Ireland and two in Canada. Each epidemic appeared to be less severe then the previous one. The salts of copper had been used in all these epidemics, but were not found of more benefit then other astringents.

Dr. A. L. SMITH asked if during the last epidemic in this city the water reservoir was then at the head of Elizabeth street, and was the water pumped up to it from the river opposite to the city?

Dr. KENNEDY said it was.

Dr. Hy. HOWARD said that 42 years ago the reservoir was a large wooded vat at the corner of Notre Dame and Bonsecours streets, the water being pumped into this from the long wharf. It was supplied by wooden pipes. There were then no water-closets in the houses.

Dr TRENHOLME said that if cholera came, he intended giving his patients large quantities of water along with spirits and camphor.

Dr. R. J. B. HOWARD said he had recently heard a discussion as to its treatment in London application of hot water to the back and abdomen, and hot alcoholic drinks with diluted sulphuric acid were strongly recommended. Enemata of carbolic acid, corrosive sublimate and nitrate of silver were said also to be of great service.

Dr. REED said that more than likely it was the acid fumes about copper works which preserved the workmen from attacks of cholera.

Stated Meeting, June 12th, 1885.

E. H. TRENHOLME, M.D., 2nd Vice-President, in the Chair.

Cancer of Rectum with Secondary Affection of Stomach.

Dr. R. J. B. HOWARD exhibited the stomach and intestines of a patient who had recently died at the Montreal General Hospital. The history of the case is as follows: James W., aged 63, had for some time had pain referred to bladder, and was sent into the hospital under Dr. Fenwick, on suspicion of having stone in the bladder. In December, 1884, he began to suffer pain over pubes, slight and limited in area, increased on lying down. This pain increased steadily in intensity, and in April last patient gave up work on this account. At this time there was frequent micturition, both day and night, but urine presented nothing unusual. He now began to lose flesh rapidly. Some three weeks before admission he had some retching, and on three occasions vomited. On admission into the hospital June 2, '85' the above symptoms were present. It was found that the stream during micturition was sometimes arrested, and that the act was attended by pain. No stone was detected in the bladder, and as the urine contained some pus, and his prostate was enlarged, he was put on treatment for cystitis. Nothing was discovered when examining prostate per rectum, except the enlargement of that gland. Two days latter he had an alarming attack of collapse, and recovering from this, symptoms of pneumonia appeared, of of which disease he died on June 9th. Before this a hard tumor was detected in the epigastrium, which was believed to be malignant disease of the pylorus, or possibly the liver. The man was much emaciated, and had a very cachectic appearance.

Necropsy.—Pneumonia of left lung and œdema. In abdomen all the glands in omentum were enlarged, some the size of a walnut, hard and firm. The gastro-colic omentum was puckered up and contained a large nodular mass. Ascending colon bent on itself, and held down by a large mass of new growth, which appeared to originate in the glands of the meso-colon. Sigmoid flexure turned up and fixed to transverse colon by another nodule of cancerous tissue, and lower down, opposite the third lumbar vertebra, adhered to a large mass formed between the layers of the mesentery. The abdominal viscera were removed *en masse*, and on further dissection an ulcerated surface the size of a man's palm was found occupying the posterior aspect of the lesser curvature of the stomach, and its wall was slightly infiltrated; the pancreas was also involved in this growth. In several other places the walls of the bowel were the seat of similar new growths, usually attacking them from without, and starting from between the layers of the mesentery. All the mesenteric and retroperitoneal glands were enlarged, firm, and evidently the seat of the same new growth. On the anterior wall of the rectum, corresponding to a mass the size of a bantam's egg, seated in wall of rectum and adherent to the bladder just above the prostate was an ulcer the size of a ten-cent piece, having raised, rolled ridges, and a somewhat depressed base. The ulcer was about four inches from anus, and no enlarged glands were found below this. Veins of prostatic plexus filled with old clot. Arteries normal. Bladder normal, with exception of enlarged prostate.

Dr. R. J. B. H. remarked that this was another of those cases where there was extensive disease of the stomach without symptoms. The original disease, without doubt commenced in the rectum, and extended upwards to the stomach through the glands. He also said that it is most unusual for malignant disease of the rectum to spread so rapidly, and from so slight a local affection to become general carcinoma. The symptoms caused by moderate enlargement of the prostate were more prominent then those caused by the extensive malignant disease.

Case of Tetany.—Dr. STEWART read a paper on this case and exhibited the patient.

A.C., aged 39, through the kindness of Dr. Mc Connell, consulted me about two months ago, complaining of diarrhœa and "spasms of the face, arms and legs." His diarrhœa began seven years ago, and has been more or less constant ever since. The spasms of the muscles of the limbs and face, which are of an intermittent character, first troubled him about five years ago. During the late American civil war he served as a private soldier throughout many of the Virginia campaigns.* He had three attacks of malarial fever, and for eighteen months suffered from chronic dysentery; and it was not until he moved to the Western

* Since this report, a microscopic examination of the primary nodule shows this to have been of the nature of true scirrhus and not epithelioma.

States, after the termination of the war, that he completely recovered from it. He never had either syphilis or rheumatism; never drank to excess; worked at his trade (stone-mason) until eighteen months ago, until he was no longer able on account of gradually-increasing general weakness and the stiffness of the muscles of his hands. In 1863 he received a severe scalp wound from a sabre, which healed in a short time. The family history is unimportant.

Patient is tall, emaciated and anæmic, with an anxious and careworn expression. About once a month the muscles of his fingers, hands and arms become the seat of tonic contractions, which generally last from ten to twelve days. The thumbs become adducted and opposed, while the fingers are adducted and semi-flexed. The contractions come at times suddenly, but usually are slow in making their appearance, and gradually increase in severity day by day up to the tenth or twelfth day, when they suddenly begin to decline, the parts becoming normal in about twenty-four hours. When the spasms are what he calls severe, the adductors of the upper arms become involved, bringing the arms crossed in front of the body, the forearms being usually semi-flexed. For some hours before, and during the whole time that the tetany is present, he has a disagreeable feeling of numbness in his fingers. The dorsum of his hands swell and become very painful also during this period. The pain is especially severe when an attempt is made to move the contracted muscles. The muscles of the face are usually more or less contracted at the same time. He has a feeling as if the skin was too tightly drawn across his face. The facial muscles are also the seat of almost constant fibrillary twitchings. The muscles of the lower extremities are only occasionally the seat of spastic contractions; when they are, the feet and toes are in a state of planter flexion, the feet being turned inwards and the thighs adducted. During the existence of tetany he has diplopia.

The electrical reactions of the nerves and muscles affected are enormously increased. During the past week, while he was suffering from one of his usual attacks, contraction of the facial muscles was induced on the application of galvanism to the facial nerve by a strength of current not exceeding ·25 of a milliampere (measured by Edelmann's galvanometer), while at the present time, when his muscles are no longer rigid, the tetany having passed away, it takes 3 milliamperes to produce a similar result. There is a corresponding difference in the reactions of the radial, ulnar and median nerves.

	Normal Period	*Tetany period.*
Facial....	3.0 milliampères.	.25 milliampères.
Radial....	5.00	1.00
Median...	4.25	.50
Ulnar....	3.50	.50

Since coming under observation, the two attacks which he has suffered from have not been attended by contraction of the muscles of the lower extremities. On this account their electrical reactions have not been ascertained. Five milliamperes is sufficient to produce tetantic contraction on the shutting of the kathode (K S Te) and on opening the anode (A O Te). There is no change in the normal formula, the K S Z > A O Z. The difference in the reactions of the nerves and muscles to the induced current during the tetany and after it has passed away is not marked. In fact the interossei require a much stronger current to produce their contraction during the tetany state than during the normal condition. This is plainly owing to the œmeda of the hands during the attacks, the œdematous tissues greatly increasing the resistance. The muscles, although flabby, are in a fairly nourished condition. The patellar reflexes are greatly exaggerated during the period of tetany, while after it has passed away it is frequently impossible to produce any contraction of the quadriceps when the patellar tendons are struck. The triceps and biceps reflexes are exaggerated during the tetany period, and absent after the muscles have become normal. No ankle clonus at either period. There is nothing definite to be made out in regard to the superficial and organic reflexes.

The tongue is constantly in a raw-looking state. The appetite, however, is usually fair. He is seldom free from diarrhœa, the average number of stools in the twenty-four hours being usually about six; only very seldom is there one stool in the day. The diarrhœa always moderates when the tetany makes its appearance. The abdomen is constantly distended; stools are large, frothy, semi-fluid, and look like pea-soup. The urine is acid, but normal in quantity, specific gravity 1030; contains great excess of both urea and indican, but is free from albumen and sugar. At times he becomes deeply jaundiced. There is no further evidence, however, physical or subjective, of disease of the liver. The apex of the heart is in the normal posi-

tion. There is no increase in the cardiac dullness, neither is there in any other evidence of cardiac disease. Nothing abnormal in the respiratory system. There is no relative increase in the number of the white-blood cells; the red appear to be normal. There is no enlargement of the spleen.

Remarks.—We have here to do with a case of chronic diarrhœa of some seven years' standing, with intermittent tetany of five years' duration. Tetany is a disease which has been known for some years. First described in France by Corvisart, later and more fully by Trousseau, but it is to Weiss and Chovstok, of Vienna, and Erb, of Heidelberg, that we are indebted, in the main, for our present knowledge of it. There are three apparently distinct forms of this disease, forms which differ much in the causes which give them origin and in their prognosis, but little in the clinical pictures which they present. By far the most variety common of this disease is known as "rheumatic" or epidemic tetany.

The second variety of tetany is more chronic, and is due to either chronic diarrhœa, prolonged lactation, or other debilitating influences. The third form follows operations for removal of enlarged thyroid glands.

Clinically, these varieties differ somewhat. The so-called rheumatic form being essentially an acute affection, coming on suddenly and terminating usually inside of two weeks, the spastic periods of a few hours' duration intermitting with normal periods. Recovery nearly always occurs. The chronic form, due to debilitating agencies, differs little from the acute form except in duration. Recovery in these cases nearly always occur also. The so-called surgical variety of the disease generally makes its appearance about a week after extripation of enlarged thyroid glands, and especially when the subject has been a young female. Many of these prove fatal within a few days, while a number become permanently chronic. Early and complete recovery is very exceptional.

Judging from published observations, tetany is an extremely rare disease on this side of the Atlantic. In England it is equally rare. On the continent of Europe it is quite common, especially in France and Germany. This is true of all forms of the disease. In Vienna, not a winter passes without an epidemic of it, while cases of the chronic and surgical varieties are not at all rare. Up to May, 1883, Billroth performed 78 operations for removal of goitres, 12 of which proved fatal, 6 of these deaths being directly due to tetany. In all, there were 13 cases of tetany following the 78 operations, 6 of which ended fatal. Two of the fatal cases ran a course of upwards of one year, while the remaining four terminated within two weeks.

Pathology—There is nothing definitely known. In the very few cases where a histological examination of the nervous structures has been obtained after death, no lesion to account for the symptoms present during life could be discovered.

I have in my possession sections of the cervical cord of a young girl who died from tetany two weeks after the removal of an enlarged thyroid gland, the only noticeable change being in the finely granular protoplasm of the ganglion cells of the anterior horns; the granules being considerably larger than they normally are. A few swollen ganglion cells are also noticeable. Simply saying that tetany is due to an exaggerated excitability of the spinal gray matter means nothing. How this excitability is induced remains unanswered. On the theory that the cerebellum is the centre for continuous movements, and the cerebrum for changing movements, Dr. Hughlings Jackson has advanced the proposition that the phenomena of tetany are best explained by defective antagonism of cerebellar influences. That during the tetanic period the cerebral influences are removed.

To explain how causes, seemingly so diverse in their operation, as "rheumatic influences," diarrhœa, lactation, and operative interferences on the thyroid glands, can induce similar symptoms is very difficult. At one time it was thought that those cases following thyroid removals were due to injury of the recurrent laryngeal nerve during the operation. Cases of tetany, however, follow this operation, no matter what care may be taken in avoiding this nerve; it is therefore fair to conclude that there is no direct causative connection, especially when we take into account the fact that irritation of the recurrent laryngeal nerve from the pressure of tumors does not induce this disease. The active cause in the case reported is undoubtly the diarrhœa, but whether induced by the direct impoverishment of the nerve centres, or through the constant peripheral (intestinal) irritation, it is impossible to say. The late N. Weiss, of Vienna, considered peripheral irritation to be the cause of the disease. He believed that this gave rise to alternate waves of vessel dilatation and contraction. During the former state we

have, according to this assumption, the tetany period, while during the latter the muscles return to their normal condition. This theory might possibly explain cases like the one under observation and those following goitre removals, but it could not apply to the "rheumatic cases."

Treatment.—No medicinal agent has any power in absolutely preventing or diminishing tetany. Billroth speaks favorably of the application of ice to the cervical spine. Erb, Chovstok and Weiss look upon galvanism as the only agent of any real value. Erb believes that it considerably shortens and ameliorates the attacks. He recommends the K A to be applied to the sternum while the A N is to be applied to the diseased parts in succession, including the muscles, main nerve trunks, and the cervical portion of the spinal cord. Since this patient was exhibited to the society, an attack was apparently averted by galvanization of the radial nerves.

In the discussion which followed the reading of the paper,

Dr. GEO. ROSS said he would like to ask Dr. Stewart the mode of death in the fatal cases he had seen. The disease is such a rare one in this country that he had seen but few cases.

Dr. HENRY HOWARD, after alluding to the various disorders of the nervous system allied to tetany, said that in his opinion a more complete anatomical and physiological knowledge of the nervous system is necessary before the exact cause of these cases can be positively known; but he thought that some irritation or inflammation of the vaso-motor nervous system may account for this disease. He has strong hopes that in the near future, with the many workers and varied means of research, the cause of disease such as cancer, tetany, etc., will be found, and when recognized early, that they may be successfully treated.

Dr. GODFREY had seen several cases of tetany, or a disease like it, during the last fifteen years. Dr. SHEPHERD asked why it is that tetany is so much more common on the continent of Europe than in America or England, epidemics of the disease being unknown in either place, and whether tetany is more common in the dark races, as is tetanus.

Dr. R. J. B. HOWARD said it was remarkable that two such different diseases as myxœdema and tetany should occur so commonly after extirpation of the thyroid gland. They occur in animals as well as man. He suggested that, where possible, the isthmus only of the thyroid should be removed as in the 150 experiments of removal of the isthmus, performed on animals by Victor Horsley, none suffered from tetany.

Dr. WILKINS said that although he had never had a case of tetany, he was much interested in the disease, and thought it probably due to irritation of the peripheral nerves, as these cases always follow diarrhœa, removal of the thyroid, or some other lesion.

Dr. STEWART, in reply, said that in the fatal cases he had seen there was spastic contraction of the respiratory muscles and bronchitis. He could not tell the reason of the frequency of the disease in Europe; of course, removal of the thyroid is a very common operation there, and this would account for some of the cases, but not the epidemic form. He had seen 60 to 70 cases in the General Hospital at Vienna at one time. So frequently did this disease follow extirpation of the thyroid, that Billroth had given up operating for bronchocele, except in cases where the tumors endangered life. He was not aware of the disease being known in the West Indies, or that it is more frequent in the negro race. As to the theories advanced to explain its nature, he thought that advanced by Weiss of Vienna the most probable. Weiss looks upon the origin of the trouble as due to irritation of the sympathetic, waves of dilatation and contraction being alternately set up.

Ureometry.—Dr. REED showed Doremus' ureometer, and illustrated the method of using it. This apparatus is very simple, consisting of one piece only—a bent tube of glass, one arm of which is graduated to represent grains per ounce of urea. The peculiarity of the instrument lies in the fact that a measured quantity of the urine to be tested is projected, by means of a nipple pipette, beyond the bend of the tube, previously filled with the usual hypobromite solution. Dr. Reed had tested it with a solution of pure urea, and found the readings correct. The price of the instrument is two dollars, and of each test under three cents. Specific gravity beads, as supplied by Parke, Davis & Co., for estimating the density of urine, were also shown and recommended, as being more convenient, simple and portable than the usual urinometers.

Stated Meeting June, 26th, 1885.

T. J. ALLOWAY, M.D. Vice-President, in the Chair.

Dr. WILLIAM GARDNER read a paper on a case of extra-uterine pregnancy, successfully treated

by electricity. Mrs. ——, aged 38, married 19 years, has had four pregnancies,—all of full term, labors natural, recoveries tedious. Ever since her second labor, 16 years ago, has suffered from symptoms of uterine disease. The last child was born 9½ years ago. Since then uterine symptoms have been worse, and consisted of pelvic and lumbar pain, bearing down sensations, proper and protracted menstrual periods, and leucorrhœa. The last period, previous to the symptoms to be detailed, occurred about October 1st, 1884. On the 16 of the same month a single complete act of coitus occurred, there having been abstinence for many months previous, and in the interval before patient's illness. From the 16th October no proper menstruation, but slight discharges of bright red blood at irregular intervals. She suffered from distress after food, nausea, and occasional vomiting, and suspected that she was pregnant. On the 20th December Dr. Gurd, of Montreal, was sent for, and found her suffering from sudden intense pelvic and abdominal pain, vomiting and faintness, amounting to collapse; deadly pallor, weak pulse, normal temperature. Pain principally referred to right iliac region; next day she seemed worse, and Dr. GARDNER saw her in consultation, and on examination found decided tenderness and induration of right iliac region. No general distension of the abdomen. By the vagina the uterus retroverted and prolapsed; the vaginal portion very low, almost at vaginal orifice, slightly softened. The fundus to the left. On the right side of, and behind uterus a firm mass, closely attached to that organ. The diagnosis was hematocele. Morphia was freely given. She rapidly improved. Two or three weeks later, a similar milder attact. After an interval, a third more severe, about the end of January. The tumour on the right of the uterus had increased. Pigmentation of linea alba, areola and follicles about nipple, and to a less extent, of whole lower abdomen. The sound entered 4 inches; cavity empty. Vaginal portion remarkably soft, and swollen. Anterior lip lying in vaginal orifice. Pulsating vessels at sides of vaginal roof. Extra-uterine fœtation was now strongly suspected. Doubtful points were marked hardness and absence of fluctuation or ballottement of tumour. On the other hand, in a few days, distinct bruit de souffle was heard. By the middle of February the tumour extended as high as the anterior superior spine of ilium, and an inch to the left of the middle line, and completely filled the space included within the lines mentioned and ramus of the pubes and crest of the ilium. It was now decided to use electricity. A strong faradic current, as strong as the patient could bear it, was passed through the mass to the right of the uterus. One pole, terminated by an olive-shaped insulated bulb, was passed into the rectum against the tumour. The other pole was a large wet sponge, applied over the mass in the right iliac region. The current was allowed to flow from 5 to 8 minutes, and repeated daily five or six times. The size, pain and tenderness of the tumour were at first increased, but after the third application the bruit de souffle was stilled. A few days after the cessation of the electricity, the size, pain and tenderness of the tumour was much reduced. Shortly afterwards patient began to have labor-like pains, with moderate bleeding. On the second day of these symptoms, examination showed dilation of the cervix, so that the finger easily reached the fundus and cornua of the uterus, and discovered a decidual membrane being separated. This was peeled off. The bloody discharge continued a few days longer. She now improved so rapidly that towards the end of March, at her urgent request, she was allowed to leave her bed, and go to a couch in the same room. But this was unfortunate, for the tumour now became very painful and tender, the surface over it assuming a blush, and becoming œdematous. Temperature rose to 103° Fah., and altogether her condition caused much anxiety. The question of opening and draining the supposed suppurating sac was seriously considered, but she soon began to improve in every respect, and in a few weeks was able to leave her bed. On the 15th June she was examined. She is still pale and thin, but has fair appetite and digestion. Has menstruated twice and profusely. Slight pain increased by exertion. Bladder irritable. The hypogastric tumour still present, but greatly reduced in size and tenderness. Per vaginam, all evidence point to recession of the mass. The uterus measures 3½ inches, and is much firmer.

Dr. Gardner remarked upon the great interest of the subject, an interest arising out of the supposed rarity, of the condition, the difficulty of diagnosis, or, perhaps, rather the rarity with which a diagnosis is made: a tragic and fatal termination alone revealing the true nature of the case, and the recent successful procedures adopted for its treatment.

Lawson Tait has recently secured some remark-

able successes by abdominal section, ligating, and excising the sac and its contents. His operations have, for the most part, been done in patients who were suffering from the symptoms of rupture with impending death. But Thomas, Lusk, Garrijes, and others in the United States, have had equally remarkable successes in averting such an occurrence by an agent so powerful, so manageable, and yet, as all experience shows, so harmless, as the faradic electric current, applied as in the case now related, and in many others. It is an agent within the capacity of the merest tyro in medical knowledge. Dr. J. G. Allen, of the United States, is credited with the first cases so treated. To be used to the best advantage it must be applied early before the third month, when rupture of the sac so commonly occurs. The question of diagnosis would, of course, always be most important. This might be difficult, but would rarely be impossible if, in the presence of subjective symptoms, a careful bimanual examination (under ether, if necessary) were made. Dr. Gardner offered the case as a contribution to the literature of the subject, and believed it to be the first case of the kind published in Canada.

Dr. SHEPHERD said when he saw the case there were evidences of septic trouble. Tait says all these cases are tubal at first; he cuts down and removes the fœtus.

Dr. HY. HOWARD said he had only seen one case of extra-uterine fœtation, it came to full term. The tumour was aspirated, followed in 24 hours by peritonitis, convulsions and death.

Dr. WILKINS asked how the electricity caused the death of the fœtus, was it by exciting strong contractions of the muscular structures of the fallopian tubes.

Dr. KENNEDY said that he had seen two cases of extra-uterine fœtation. One of these had been reported to the society some years ago. In this case the woman came to him about the 5th or 6th month to engage his services. Her appearence was normal, and she felt quite well, at the end of nine months he was sent for as symptoms of labor had set in; on examination of the uterus found it empty and the actual condition diagnosed.

The case was explained to the patient and operation suggested, but she and her friends positively refused such assistance. The movements of the fœtus were quite lively up to this time but ceased in a few days, and in a short time after septic fever setting in she was sent to the General Hospital. In the hospital she passed per rectum several fœtal bones, sloughing having taken place between the sac and adjacent bowel. This patient died from septic poisoning, and the post mortem confirmed the diagnosis previously made. The second case came under his notice eighteen months ago. He was asked to see in consultation a patient supposed to have pelvic cellulitis. After examining her he coincided with the family doctor in this opinion; but on a subsequent consultation he had come to the conclusion that the case was one of extra-uterine fœtation. Afterwards during the absence of his confrere he took charge of the case. The patient had been married before and had two children by her first husband. The present husband was a strong, big man with whom intercourse was generally painful. Previous to her illness she had thought herself pregnant, but the menstrual discharge had continued, somewhat altered from the usual flow. When about 3½ months in gestation, and while dusting down the stairs, she was seized with a sudden severe pain in the abdomen, which almost caused her to faint. She was prescribed opiates and rest, and after a few days was up again. About ten days after she had a second attack and later a third. The last seizure was accompanied with a profuse flow and discharge of a membrane resembling the decidua. Abortion was supposed to have occurred followed by pelvic inflammation. Although pelvic cellulitis was diagnosed, Dr. Kennedy has now no doubt that the primary condition was a case of extra-uterine fœtation; the character of the seizure and the subsequent symptoms being such as are observed in tubal pregnancy. Fortunately death of the fœtus no doubt ensued, and the subsequent inflammation had encysted its remains. This patient was a long time ill but afterwards recovered. A tumor yet remains on the right side and coitus is still painful.

Dr. TRENHOLME had met with one well marked case where the fœtus perished before its movements were felt. The patient becoming free from symptoms went to the seaside where she passed several small bones per rectum. There remained indications of induration. She has been in perfect health ever since.

Another case he was called to see, where the fœtus was as the sixth month. On examining the uterus it measured 7 or 8 in., was empty, but on the left side he found a bulging, and thought the case to be one of tubo-uterine fœtation. He scraped over

the bulged wall with a curette, and in 24 or 36 hours this was followed by expulsion of the fœtus. He thinks the electricity kills from shock not from exciting muscular contraction, as most likely the first seizure corresponded with the rupture of the tube, allowing the contents of the sack to fall into the abdomen, where there would be no muscles constricting it.

Dr. ALLOWAY said he had read of a woman dying at the age of 75 and in whose abdomen fœtal bones were found at the post mortem examination. When 22 years of age she had had symptoms of extra-uterine pregnancy.

Dr. GARDNER said that Tait found by examination that all cases were first tubal. Tait confines his operations to cases where rupture has occurred. Electricity is safe and simple to use. In this case electricity might have been used earlier. The electricity kills by shock to the child's heart.

Most cases are right sided. He believed there was not much doubt but that Dr. Kennedy's second case was one of extra-uterine pregnancy.

Dr. GURD mentioned that their patient was doing well, being able now to take short walks.

Dr. CAMERON asked if menstruation in this case had been abnormal. He had a case 8 years ago where the woman suffered greatly at each period as if from inflammation of the fallopian tubes. Might not these cases be caused by narrowing of the tube by contraction?

Dr. GARDNER said this explanation was a feasible one.

Dr. TRENHOLME said that a cellulitis with contracting bands might destroy the potency of the tube.

Dr. WILKINS said that a chronic diseased condition might destroy the cilia of the mucous membrane of the tube, and so account for the fructified ovæ not being sent down into the uterus.

Dr. LAPTHORN SMITH read a short paper, entitled "Notes on Gynæcology, being some observations made during a month's visit to the Women's Hospital of New York. He began by referring to the great frequency with which the major gynæcological operations are performed, a frequency, however, which seemed to be generally justified by the results. Ovariotomies and hysterotomies were of daily occurrence, those of them which took place at the Woman's Hospital being performed in detached cottages, under the most perfect sanitary conditions. He thought, however, that they were sometimes done in the face of fearful odds against success, the consequence being that the death rate was rather high. He spoke of the skill and coolness of the operators and the splendid training of the assistants and nurses. Although the operations were not done antiseptically in the strictest sense, yet every precaution was taken to insure cleanliness. Dr. Hunter takes special care not to allow a single drop of blood to enter the peritoneal cavity when performing hystereotomy: the peritoneum not being opened until all bleeding from the incision in the abdominal wall had been arrested. When the uterine tumor had been drawn through the opening, it is immediately wrapped in a carbolized towel, in which it is held, and the edges of the wound are enfolded in warm carbolized towels. Ether was the only anæsthetic used.

The operations for lacerated cervix and lacerated perineum are performed with still greater frequency; the former being done not only for the purpose of closing the rent but still more often as a rapid method of removing the hypertrophy and inflammatory exudation of subinvolution. The operator made it a rule to be satisfied with nothing short of the complete removal of the cysts formed by the deceased nabothian glands, digging down and removing indurated tissue almost as far as the internal os. The needles used were short, round, slightly curved, and having one surface ground flat near the point, and for sutures a No. 26 pure silver wire attached to the end of a plaited silk thread was generally employed.

The operation for lacerated perinenium is also very frequently done in many cases for the cure of rectocele and displacement of the uterus. The reader stated that he frequently met with cases of prolapsus uteri in his practice, in whom the vulva was so large that no form of ring pessary could be retained; all such cases were suitable for operating.

He also remarked that in these two operations the scissors and tenaculum have completely taken the place of the knife and forceps.

Two other instruments which he found in general use were the Wylie dilator and the Thomas blunt curette, the advantages and immunity from danger he set forth at some length; nevertheless it is better to keep the patient anæsthetized. The reader then related the various uses to which the tamponnade of the vagina or columning is put to; and he stated that it has very largely taken the place of solid pessaries, especially when there is an inflammation in or about the displaced organ.

He stated that the introduction of cotton tampons soaked in glycerine or glycerine of tannin and the use of the hot water douche have marked a new era in the treatment of pelvic cellulites, subinvolution of the uterus and the inflammatory affections of the generative organs.

He concluded by describing a case under Emmet's care, in which that distinguished operator had intentionally made a vesico vaginal fistula for the cure of chronic cystitis which had been otherwise intractable. After three or four months the cystitis was cured and he closed the fistula without much difficulty.

Progress of Science.

THE GULSTONIAN LECTURES ON MALIGNANT ENDOCARDITIS.

In the *British Medical Journal* of March 7, 14 and 21 are found the Gulstonian Lectures delivered by Prof. William Osler, of the University of Pennsylvania. These lectures give the most complete exposition of the subject of ulcerative endocarditis, or, as he prefers to call it, malignant endocarditis, which has yet been made.

There may be an acute or a chronic form. Anatomically, the acute form may be subdivided into various forms, as the plastic, papillary, verrucose, fungous, ulcerative, etc.; etiologically, the varieties are as numerous as the diseases in which it occurs, as puerperal, scarlatinal and the like; clinically, we have two classes, the simple and the grave. Cases are said to be primary or secondary, but there can be found to exist no essential anatomical or pathological differences. Anatomical classification would group together cases widely different, clinically. The term ulcerative is in general use, but does not include those cases where no actual destruction of tissue has taken place, and yet manifest severe constitutional disturbance. The clinical classification into simple and malignant cases, whether ulcerative or vegetative, is the one of most practical value.

Malignant endocarditis occurs as: 1. A primary disease of the lining membrane, rather predisposed to by constitutional debility or previous valvular disease; 2. A secondary affection to many diseases, especially rheumatic fever, pneumonia, scarlet fever, diphtheria, ague; 3. An associated condition in septic processes, traumatic or puerperal. The lecturer then discusses in order the anatomical, the clinical, and, lastly, the etiological and pathological characters of the disease.

The lesions, by no means uniform, may be vegetative, ulcerative or suppurative, either alone or in combination, and in all degrees of intensity. He relates a case which proved fatal, the endocardium showing simply vegetations without ulceration. The combination of ulcerative and fungating outgrowths he thinks the most common condition. The ulceration may vary from simple abrasion to destruction of a valve or deep involvement of the muscular substance. The vegetations vary considerable in appearance and consistence, from soft, greyish-white masses to large cauliflower excrescences, with deep jagged fissures, or long pendulous, stalactitic masses. The friction of these masses against the wall may produce numerous smaller vegetations. Conservative changes may take place; fibroid induration of the deeper parts, the superficial remaining unchanged or necrotic. Two conditions are to be distinguished from malignant endocarditis, namely, atheromatous degeneration in sclerotic valves, and the firm, white globular thrombi of the auricular appendices and of the interstices of the columnæ corneæ of the ventricles.

Histologically, fresh endocardial vegetations are made up of round and fusiform cells derived from the sub-endothelial layer. Varying with the rapidity of the growth the mass will resemble granulation-tissue or a fibrous outgrowth. Sometimes a cap of fibrin is deposited on the growth and in this are found, more or less abundantly, the blood-plates of Bizzozero.

The larger vegetations consists of a granular material, composed of altered and dead tissue elements, fibrinous exudation and colonies of micrococci. He regards the micrococci as constant elements in these vegetations. They vary greatly in number and arrangement, occurring singly or in groups, most abundant in the deeper layers. Some of the smaller vegetations seem almost exclusively made up of them. Klebs has distinguished two forms, one, found in septic, the other, in rheumatic cases. Small elongated bacilli have also been found, and Cornil, having found the bacillus tuberculosis in endocardial vegetations in a case of phthisis, expresses the opinion that we shall, before long have accurate knowledge of a variety of micro-organisms in endocarditis, depending upon the nature of the primary disease.

The local effects of the ulcerative changes are important. Perforation of a valve-segment is extremely common, the hole being clean-cut or irregular, or sometimes great fungous vegetations may completely close and conceal the perforation. Erosion of the chordæ, ulceration of the heart-muscle, leading to perforation of the septum or of the wall of a chamber, the production of aneurisms of the heart or vessels, are some of the effects.

Sclerotic or malformed valves are especially prone to acute inflammation and fusion of two aortic cusps is nearly always followed by sclerotic changes.

Of associated pathological changes we have, first, those connected with the primary disease, and, second, those resulting from embolism. These

latter may be divided into " those without embolic processes, cases in which the infarcts are simple, not suppurative, those in which there are innumerable suppurative infarcts, " and mixed cases. In marked malignant cases these embolic features may be absent. They may not be suppurative, but simply hæmorrhagic, though in traumatic and puerperal cases the infarcts are invariably septic. The spleen is most often the seat of infection, then the kidneys. The lungs are usually affected when the right side of the heart is involved. These infarcts may be found also all along the gastro-intestinal tracts, forming in some instances numerous miliary abscesses. Gastric ulcer has resulted in this manner. The liver may be similarly affected, and pleurisy and pericarditis are not uncommon complications. The cerebral lesions may be meningeal or of the brain substance, manifested by meningitis or various paralyses.

It would be difficult to present a satisfactory clinical picture of this disease. The general symptoms are those of a febrile affection of variable intensity, " ushered in with rigors, pain in the back, vomiting, headache, etc. Prostration, delirium, sweating and other signs of severe constitutional disturbance are generally present. Arising in the course of some other disease, the symptomatology partakes of that of the primary affection, additional symptoms and signs manifesting themselves, owing to the local cardiac implication and its results.

So diverse are the features of malignant endocarditis that Dr. Osler has attempted to arrange them into groups. In the first group are placed those cases in which the endocarditis is merely a part of a septic or pyæmic state, resulting from an external wound, a puerperal process, or an acute necrosis, about 18 per cent. of the doctor's cases being of this nature; the septic cases do not strictly come within the province of the physician, but must be taken into account in a description of the disease. These cases arise through the venous system.

In the pyæmic cases, the clinical features are of a decided pyæmic type, the metastatic lesions are in the territory of the arterial system and have their source in the heart. Two varieties of these cases may be made out: 1. Those of ordinary pyæmic type; 2. Those marked by a singularly regular intermittency of the pyrexia. The cases may resemble so closely cases of quotidian or tertian ague as to make it almost impossible without a necropsy to differentiate, though the absolute failure of quinine may cause one to question the diagnosis of malarial trouble. The typhoid type is, however, by far the most common. The main feature is the irregular character of the fever, but sometimes the cardiac affection being masked, the course of temperature may so simulate typhoid as to make diagnosis difficult, except after death.

In the second group are placed the cardiac cases that is, those occurring in patients the subject of valve-disease, who suddenly show evidence of fresh endocarditis, accompanied by febrile sysmptoms. These cases may present features of the pyæmic, typhoid or cerebral types, in some may be intensely acute, in others mild and chronic. In the third group are the cerebral cases, in which the earliest observed symptoms, or the most marked, are cerebral or cerebro-spinal. Some are first seen in coma, or the symptoms may be those of meningitis.

The course of endocarditis presents many variations, some cases running their course in a week, others lasting even two or three months, though rarely prolonged beyond four or five weeks.

As regards diagnosis, this is frequently so difficult that many skillful diagnosticians have been unable to discover the trouble until *post mortem*. In the group of cardiac cases, the diagnosis is easy enough, the irregular type of fever taken with the physical signs being sufficient, but in other cases, the cardiac affection not being apparent, it may, be difficult to differentiate from quotidian or tertian, intermittent, from typhoid, typhus, cerebro-spinal meningitis or even hæmorrhagic small-pox. In pyæmic cases, the diagnosis must be made between ordinary septic infection from a wound and auto-infection from a primary endocardial inflammation.

In determining the etiological relations of malignant endocarditis, Dr. Osler has gone over the records of 209 cases. 37 of these occurred in connection with traumatic and puerperal pyæmia, in 45 no record of previous disease, in 127 cases there was a possible connection with past or existing disease. Middle life gives the greatest number of cases, young children being rarely victims; of 160 cases (exclusive of traumatic and puerperal), 99 were males, 61 females. Debility and addiction to drink predispose; sclerotic valvulitis is a very important etiological factor. Of the 127 cases, secondary to other disease, in 53 there was a history of rheumatism, past or present, in 54 the attack was associated with pneumonia, diphtheria was rarely associated, with dysentery a few cases, in the eruptive fevers a few cases, and even in the course of malarial fever a few cases have developed.

With regard to pathology, Dr. Osler speaks with due caution, not allowing himself to be carried away by the attractiveness of the theory. Accepting as a plausible explanation the mycotic pathology of malignant endocarditis, he yet feels hesitation in urging it. We do not yet know with sufficient accuracy the frequency of occurrence of the microbes in the disease, we want to know the varieties of microbes in secondary endocarditis and their relation to those of the primary disease; and, thirdly, we are only on the threshold of inquiries concerning the culture of these organisms, the microscopic characters of their growth and the possible experimental production of endocarditis. *New Orleans Medical Journal.*

CALOMEL IN THE TREATMENT OF OTORRHŒA.

Dr. J. Gottstein, in the *Archires of Otology*, September to December, 1884, strongly recommends the use of calomel in the treatment of otorrhœa. He says: During the past year I have used the calomel by way of trial in a number of cases that have seemed suitable, especially such as could be submitted to daily observation.

I have satisfied myself (1) that the remedy is absolutely free from irritation to the mucous membrane of the middle ear; (2) that it forms neither upon nor in the mucous membrane any precipitate difficult of removal; (3) that surprising results are often obtained under its use.

Accordingly, since the beginning of the present year, I have, in my private practice as well as in my polyclinic, employed calomel in the treatment of all cases of otorrhœa in which, following Bezold's direction, I had previously made use of boric acid alone, or as a supplementary means. I withheld the calomel only from such patients as, coming from a distance, I had an opportunity to see but once.

My observations now exceed eighty in number, so that I feel justified in communicating the results of my experience with this method.

My method of procedure is as follows: The ear is, in the usual way, syringed carefully with a weak sublimate solution (one-tenth per cent.); the residue of the secretion is forced into the external meatus by the employment of Politzer's method, and then removed by syringing; and, finally, the ear well is dried with cotton.

The calomel (vapore parat.) is then blown in through a powder-blower,* and the auditory canal closed as well as possible by means of cotton. The further treatment is the same as with the boric acid.

That on which I lay the most stress is that calomel, in my opinion, has a much more certain and decided antiseptic action than the boric acid.

I am anxious to avoid the error into which those authors fall who over-estimate the value of the remedies recommended by them. Calomel also fails in some of the cases in which powerful antiseptic action is desired, because considerable tissue alterations in the drum cavity are absent. Yet I have, with no method of treatment, not even with the boric acid, attained such speedy results as with this remedy in acute as well as in chronic forms of otorrhœa.

The calomel is also suitable, as is the boric acid, for employment after operations in the middle ear, cauterization with nitrate of silver, the use of the galvano-cautery and in conjuntion with the alcohol treatment. In these cases, the powerful antiseptic action of the remedy is conspicuous.

*In my consultation hours I make use of the powder-blower of Kabierski (*Centralblatt für Chirurgie* 1883, No. 33), which I have found, after long trial, the most suitable for the treatment of the ear as well as of the nose and larynx. It has the advantage that it does not need to be filled for each case, that the insufflation can be made with ease and accuracy during the examination of the parts, and, finally a separate tip can be used for each patient, a measure necessary for the attainment of a thorough antisepsis.

INCONTINENCE OF URINE IN CHILDHOOD.

Dr. Eustace Smith, in his recent work on children, gives the following: ℞ Tr. belladon., f ʒ j; potas bro·m.; gr. x; infus. digitalis, f ʒ i j; aq q. .s. ad. f ʒ ss. M. This is one dose.

He adds strychnia when the affection occurs both day and night. This author finds a great tolerance of belladonna in children, and believes that it should be pushed to its toxic effect when the case does not yield readily.—*Medical Bulletin.*

Prof. S. W. Gross says it is a mistake to apply a poultice to an acute abscess after its contents have been evacuated. The endeavor should be to prevent and not to encourage the further formation of pus. To do this the cavity of the abscess should be syringed out with a 1 to 1000 solution of mercuric bichloride, and the walls brought together by compresses and bandage, and union allowed to take place by granulation. If the abscess be of large size a drainage tube should be left in for a couple of days until the serious oozing has been reduced to a minimum. The tube should then be taken out and the walls brought close together. If the healing process be delayed by the development of flabby œdematous granulations they can be stimulated to healthy action by the injection of a three per cent. solution of car bolic acid or the application of chloride of zinc gr. iij., aqua ʒ j.—*Med. Bulletin.*

THE TREATMENT OF CARBUNCLE WITHOUT INCISION.

In the course of the paper on this subject before the American Medical Association, by Dr. L. Duncan Bulkley (*Med. News*, May 9, 1885), the author related the case of a gentleman, aged 56, large and florid, who suffered for several years with eczema of the left foot. He was also diabetic. Following upon this eruption was a large carbuncle. He applied to this tumor, thickly spread on the woolen side of lint, the following ointment:

R.	Ergot. fl. ext.,	ʒ ij
	Zinci oxidi,	ʒ ss
	Unguent. aq. rosæ,	℥ ij.

Covering this was cotton-batting, to prevent blows or injury. He was given sulphite of calcium ¼ gr. every two hours, and occasionally the following:

R.	Magnesiæ sulphat.,	ʒ iv
	Ferri sulphat.,	ʒ j
	Acid. sulphurici dil.,	ʒ iij
	Syr. zingiber,	℥ j
	Aquæ,	ad. ℥ iij. M.

S.—Teaspoonful in water through a tube three times daily.

At bedtime Dover's powder was administered, to give rest when required. The result of the treatment was cessation of pain, rapid resolution, and a cure, except some induration, in eighteen days. The man continued at his work.

He summed up his paper as follows:

1. Avoid any irritation, as pressure, blows, etc.
2. Avoid warmth and moisture, as in poultices.
3. Avoid incisions.
4. Do not use stimulants.
5. Protect the inflamed parts with the ointment given above. The solid extract of ergot may be used if desired. Spread the ointment at least one-third inch thick.
6. Use sulphite of calcium every two hours for its effect upon suppuration.
7. Employ good, nutritious food, and fresh air.
8. A sedative, if desired, and occasionally the laxative and refrigerant tonic as above.

The advantages are:

1. Short time required for recovery.
2. Cessation of pain.
3. No scar.
4. No operation.
5. No detention from business.

In the early treatment of gonorrhœa, Prof. Gross condemns the use of injections. His plan is as follows: If possible, put the patient to bed; give him at the outside a purge, by administering Epsom and Rochelle salts, each 2 drachms, in lemon syrup. Allow no meat or any stimulating articles of diet, etc. Malt liquors do more harm than alcoholic, so interdict both. No tea or coffee, but give him milk, eggs and some oysters, etc. Three times daily he is to hold the penis in a cup of hot water—quite hot. Keep the organ there for five minutes at a time, then wipe it gently each time.

The internal treatment will be by the "antimonial and saline mixture":

R. Antimonii et potassii tartrat,	1-10 grains.	
Magnesii sulphatis,	2 scruples.	
Morphiæ sulphatis,	1-16 grain.	
Tinct. aconiti radicis,	1 drop.	
Liquor potassii citrat.,	½ drachm.	
Olei limonis,	½ drop.	
Elixir. simplicis,	½ ounce.	M.

Sig.—Ter die.

By this treatment the urine will be rendered bland and unirritating. Should the urine persist in "scalding," then add to the above prescription 10 drops tinct. cannabis indicæ. To prevent or cure chordee, order at night a suppository of—

R. Extrat. opii,
Camphoræ, *aa* 3 grains.

In the course of four or five days the discharge from the urethra will look more like laudable pus; then order an injection;

R. Hydrargyri chloridi corrosivi,	2 grains.
Aquæ destillat.,	1 pint.

Sig.—With a syringe that holds an ounce, inject into the urethra—having first "flushed" the canal several times by voiding urine—and retain the fluid for five minutes.

Internally, a useful combination is that used at the out-door department of the hospital, and consisting of—

R. Cubebæ,	2 ounces.
Alum. pulv.,	1 drachm.

Sig.—Of this take a heaping teaspoonful in a tumbler of water ter die; the dose to be increased.

Should the discharge per urethram still persist, use an injection of—

R. Liquor. plumbi subacetatis,	1 drachm.	
Aquæ,	10 ounces.	M.
Or—		
R. Plumbi acetatis,	2 grains.	
Zinci sulphat,	3 grains.	
Aquæ,	1 ounce.	M.
Or—		
R. Acidi tannici,	2 grains.	
Aquæ,	1 ounce.	M.

As an application to bed-sores, Prof. Bartholow recommends: Alum, ½ ounce; whites of four eggs, and tincture of camphor, 1½ ounce.

THE TREATMENT OF PNEUMONIA.*

By William Gilchrist Burnie, M.D.

During the last thirty years a great change has taken place in the opinion of the profession with regard to the treatment of pneumonia. I believe we have arrived at more correct notions in the matter of this important disease than formerly obtained. Our precursors were more remarkable than we are for treating diseases heroically, for giving them battle, for knocking them down. We do not object to the process, provided it be attended with no collateral or ulterior mischief greater than the evil overcome. Inflammation, of which so much used to be heard, and of which comparatively so little is heard now, used to be a frightful bugbear. The practitioner's mental eye was riveted on that dire symptom, and other conditions present, and especially prospective, were consequently apt to be overlooked or not anticipated. I remember long ago a young enthusiast exclaiming, "Inflammation of the lungs!—why should we allow inflammation of the lungs to get the better of us? Can't we drain every drop of blood out of the lungs rather than be beaten?" Other *desiderata* were here evidently overlooked, and notably the main object, the preservation of the life of the patient. My friend but represented

*Read before the Bradford Medico-Chirurgical Society, March 3.

in an exaggerated manner—caricatured—the opinion of the day—he was influenced by what he had been taught. Terrible thing this teaching—this education! It is wonderful and dreadful what we may be taught to believe and to act upon.

About fifty years ago a Cyclopedia of Practical Medicine was published by Drs. Forbes, Tweedie and Conolly. This work then represented the opinions of the profession as much as the Reynolds' the Quains, and the Ziemssens do now. I find in the Cyclopedia published in 1834 the following observations on the treatment of pneumonia:

"Cullen advises that blood be drawn either until there be remission of the pain and relief of the respiration, or if these do not appear until symptoms of commencing syncope come on. This, we believe, is the plan most commonly pursued in this country, and at this first bleeding a quantity varying from 16 to 40 oz. of blood may be taken before either of these effects is produced. By some practitioners a much larger quantity has been taken without producing syncope, even to the amount of 70 or 80 ounces; but we consider it doubtful whether it is ever advisable to exceed the highest quantity before stated. Cullen observes that a first bleeding, however large, will seldom prove a cure of the disease; and as the pain and other symptoms recur, the measure must be repeated, even in the course of the same day, to as full an extent as before; and although its greatest efficacy is in the first three days, this recurrence will make a repetition of the measure proper at any period of the disease, especially within the first fortnight. With this practice may be contrasted that of many Continental physicians, who never take more than twelve or sixteen ounces daily, and limit the bleeding to the first two or three days, under the apprehension that larger and later depletions interfere with the natural crisis of the disease."

* * * * *

"It is a satisfactory proof of the superiority of the English method of practice to find that the best authorities in France now advocate free depletions much more than formerly. Andral and Chomel recommend blood-letting to sixteen or twenty ounces, practised, if necessary, two or three times a day, the first days of the disease, and more moderately afterwards. Some of their countrymen still more recently have prescribed two or three pounds to be drawn every twelve hours at the commencement of the inflammation, and if the dyspnœa continues, eight or twelve ounces daily afterwards."

* * * *

"Expectant medicine is both irrational and dangerous."

I need not pursue the article; it goes on at considerable length to discuss the methods of this extensive depletion. It goes on to discuss how best to produce a feeling of faintness in the patient—the effect of opening two veins at once—bleeding in the semi-erect posture—how "nervous constitutions and those liable to palpitations and fainting fits must be coaxed gradually to bear a full depletion."

"Many things have happened since then!" We have travelled a long way. Fifty years after these words were published we have in "Quain's Dictionary of Medicine:"

"The heroic methods of treatment (of pneumonia) by venesection, tartar emetic, &c., so much in vogue in the past, had for their object the controlling or cutting short of a local affection of the lung; hence the unfavorable results which attended them. As these methods have been abandoned, and there has existed a more correct appreciation of the pathology of the disease, the mortality attending it has diminished."

To explain the diversity some (and among them learned professors) have proclaimed an alteration in the human constitution, or that the disease has changed its type. I remember seeing a hale old woman of 93, and she told me seriously that the climate was altered since her youth—that the seasons were now much colder than they used to be. We smile at the old lady, otherwise shrewd, being blinded to the real cause of her feeling; but is not the change of type doctrine on a par with her notion. If it is said the change of type is in the disease and not in the patients, the belief is equally ridiculous.

We flatter ourselves that the change is to be accounted for by our superior knowledge and by the advance of physiological and pathological science. Changes in the management of disease must first be suggested by physiology and pathology, but the results must be the criterion; for these branches of knowledge cannot be accurate enough to be infallible. There exist so many possibilities of oversights and of unknown conflicting and disturbing circumstances that physiological reasonings about the treatment of disease must stand the test of experiment—must only be accepted *à posteriori*.

I do not suppose that we have arrived at the most correct treatment of pneumonia—certainly not of many other diseases. The last fashion (as with the women) is always the most captivating. Still, I do think there has of late years been a rational and defensible change in the treatment of pneumonia. At the same time, the swing of the pendulum may have carried us a little too far, and may have made us neglect many useful practical facts in vogue among our predecessors. The complete setting aside of blood-letting in pneumonia and in some other diseases is a case in point. No doubt blood-letting was carried to a ridiculous—to an injurious extent—was accredited with benefits which it never conferred, and failed to get deserved discredit for great evils that it brought about. But I have no doubt that much mischief is now often done by the omission of that potent remedy—especially when it is required for

the relief of cardiac and respiratory distress—from urgent pectoral embarrassment.

Take an ordinary case of acute pneumonia—take that of a man of thirty-five. The disease is more common, by-the-by, in the male sex. Let the patient be fairly developed and of average weight and strength. He has a pulse of 105. He has 35 respirations in the minute. He is hot (temp. say 103 deg.) He is anxious. His breathing is shallow. He has a pain in the side (say the right one, as that is more usually affected than the left). He has been forty-eight hours ill when you were called in. The short period of *malaise* had been overlooked. You were sent for when he got into difficulties (as usual). What would you do? Bleed? No. And yet the medical man attending your grandfather would have been looked on as a homicide if he had not flourished his lancet and abstracted some thirty or forty ounces of blood. Give him antimony? Well, not in the poisonous doses that used to be frequent. Antimony, however, is a valuable depressant in robust constitutions and in small doses, acting on the skin and relieving by diaphoresis, might not be contra-indicated—possibly used with great advantage. What is to be done for this patient is this: Have a large airy chamber—a thing very difficult to get at in many cases of private practice if there be not a sufficient amount of pecuniary competence. Keep that chamber at a temperature of 60 deg. or 62 deg. I do not think that a higher temperature is desirable in pneumonia. I would say 65 deg. to 67 deg. in broncho-pneumonia, and 72 deg. to 75 deg. in bronchitis. The chamber should be well ventilated with *no* or *few* draughts. Here is a difficulty again. But draughts are not so injurious in pneumonia as in bronchitis. Neither is the dryness of the air; though in the case of the air being too dry, by the action of a fire or the prevalence of a dry north or east wind, some means may be taken to impart the mollifying influence of water. This can be done by setting a basin or basins in the room in which is to be poured hot water. We differ here from bronchitis again, where a moist air is necessary to soothe the irritated mucous surfaces, and the bronchitis kettle can be usefully brought into play. *Rest* is wanted for our patient—anatomical and physiological. Under the first heading may come the position of the patient. He must be so placed that the motions of respiration may be as free as possible; and under the second he must not be bothered with business or with mental processes of any sort, and especially be debarred from talking. He has quite enough to do with that constant hacking cough of his, and with getting breath. Thus, by means of a fitting temperature, general composure, and physiological rest particularly, the patient will in the course of nature probably arrive at a crisis before the tenth or eleventh day. But nourishment must not have been omitted in the meantime. You cannot load him with heavy food suitable for the body in a state of activity, for the process of digesting it would but interrupt what I have called physiological rest. Milk and animal broths seem the best foods, especially the former, the latter being only used as a relief from the constant exhibition of the first.

A Dr. Robert Hamilton opposed the exhibition of too much fluid as a component in the materials of nutrition, on the ground that it loaded the vessels. There seems some reason in this. An egg beaten up (when wine is in the course of exhibition it can be conveniently mixed with it) is an appropriate article of diet.

After the crisis you have the sufferer pretty much exhausted. Now comes the corroborative treatment—the rebuilding-up. It has always appeared to me that a great objection to the blood-letting system was the waste of that precious fluid which in convalescence was to come in so usefully. We throw away our capital—we have no opportunity during the disease to increase it and now we find ourselves bankrupt. No wonder that the anti-venesectionists can bring statistics to prove that blood-letting increased the mortality—increased the mortality! That was a curious characteristic of a method of cure. In convalescence, as there is a tendency to relapse, we must be more careful in many respects than during the severity of the attack. We must be more guarded in reference to draughts and the taking of cold. We must feed up the patient with mild nutritious food and assist the system in its assimilation with more or less of wine or other stimulant. We must re-fortify the constitution with iron—perhaps cod-liver oil—with cinchona or quinine.

But it may be said that this is all expectant, or nearly so. Well, so be it. I think that the true system of the treatment of simple pneumonia should be expectant. A gardener cannot force a plant to grow by violence. His function is to create, supply or promote such surrounding circumstances as will help his plant to grow. Our object should be to remove obstacles to the patient's *growing* better, to supply circumstances to enable him to attain the grand point whic the *vis medicatrix Naturæ* is always aiming at.

But would I reject *heroic* measures when needed? By no means. Have your lancet ready, your lecches, your antimony, and your alcohol. Cases do not always proceed in the ordinary or typical manner. Sometimes you may have very desperate cases—desperate from the nature of their causation—from complications—from peculiarities in the patient or from incidents in their course. In a very plethoric subject laboring under a severe attack—temperature high (say 105 deg.), with a rapid pulse (say 120)—great dyspnœa—the right side of the heart staggering under the block, the best thing to be done is to draw blood and to draw it freely, never forgetting, however, that it is your capital account you are drawing from. Marked relief is procured in this manner; and that relief clears the way for us—clears the blocked line and

enables us to travel more smoothly—bring us back to a state of things more akin to the typical or ordinary pneumonia. The amount of dyspnœa—the imminence of apnœa—the strength of the patient—the amount of blood to spare—and many other circumstances, must be collated and reasoned on the practitioners' mind. The passive congestion of the aged, even when associated with a distressing state of the circulation and respiration, does not indicate bleeding—contra-indicates it even. So does a constitution vitiated by the prolonged use of alcohol. In young children a leech or two takes the place of venesection. But even in weak patients from breathlessness and pulmonary distress, and an engorged right side of the heart, the question of venesection may arise. Every case, in fact, of pneumonia must be treated on its own characteristics. You have in the weakly the debilitating effect of the bleeding to anticipate, but sometimes you must run the risk to save the patient from dissolution, or a disorganised state of the lung. Chronic pneumonia degenerating into phthisis—and tubercles were no doubt the frequent sequels of the depletory method. On the whole, then, I should say that blood-letting in pneumonia should not altogether be banished from our Armamentarium—quite the contrary: but that it should be resorted to with deliberation, thoughtfulness, calculation and caution. I hope the use of the lancet is not so obsolete in rural neighborhoods as it is in towns, for I am sure the hardy and robust agriculturist must often present a fair object to withstand easily the effects of depletion when it is required.

In *antimony* I do believe that we have a very valuable drug. Like bleeding, it used to be pushed to a very great extent. People, in what we will now call ancient times, forty or fifty years ago—crammed the patient with antimony after bleeding—used to nurse the patient into tolerance of the drug when it was intolerable in order to gain advantage from its specific virtues. Some bold heretics (principally on the Continent) depended on antimony without bleeding, and gave it in very frequent and large doses. Dr. Macintosh (a very good practical physician) depended much on it, saying that it "reduced the scale of the system." I have not time in this paper to elaborate the cases and the circumstances in which I think antimony should be resorted to, but I may remark that it will often come in as a depressant when there are reasons against bleeding, that its diaphoretic and expectorant action are generally beneficial.

With regard to veratria and aconite I can say nothing. Perhaps some members will kindly favor us with their experience on these two drugs.

Calomel and opium, again, was a favorite medicine with our fathers. I believe calomel and opium can be used now with discretion advantageously. My experience is that the bowels should be moderately relieved, and the irritative diarrhœa sometimes accompanying or following pneumonia should be soothed, excessive alvine discharges checked.

Opium used to be given to allay the pain and the cough. This is a dangerous expedient, though a dose of opium may in certain circumstances be allowable. It is not, however, so dangerous in pneumonia as in bronchitis.

Warm cataplasms seem to relieve the local pain in the early stages. Leeches, too, sometimes give local relief, though the objections to their use on account of the loss of blood must be the same, though in a minor degree, as those to abstracting blood from a vein.

Blisters are sometimes useful, but seldom. Their great use is in pleurisy, and we sometimes have pleuro-pneumonia, generally indeed some pleurisy, in the viscera pleura covering the affected lobe or lobes.

Senega—or senega with ammonia—I consider most useful in the exhausting expectoration succeeding pneumonia, especially in the aged.

But alcohol, we had nearly forgotten this potent drug. Here is a hobby, too, that has been overridden by a certain school. I consider alcohol a most valuable help to us, very valuable, indeed, indispensable; but that it has been used by its advocates indiscriminately. The use of alcohol wants great discrimination. In the phlogistic forms and stages of pneumonia I think it is decidedly contraindicated, but where there is flagging I think it necessary. I think it necessary when there is exhaustion, when there is a dry tongue, when there is a cardiac failure, and when there is delirium. The pulse is not so high in pneumonia as might have been expected, at least it is low in comparative relation to the respiration. When the pulse gets over 120 alcohol is required. And alcohol, in the shape of wine, is most useful after defervescence as part of the usual diet. In the nature of this paper one can only speak of pneumonia in the abstract. I have all along wished it to be understood that in each individual case we are subject to modification from concomitant causes. Digitalis is often useful, and from different reasons, and in different doses, sometimes to depress excitement, and sometimes to stimulate the heart.

Another form of treatment, more in vogue in Germany than in England, is the application of cold. The reduction of the temperature by cold I have no experience of, shall be glad to hear observations from any member who has. We could not apply cold to the affected locality at the same time as a warm cataplasm. But besides this, in the case of hyper-pyrexia I should think it better applied to the head than to the chest.

In senile pneumonia, in pneumonia associated with constitutional debility, in the pneumonia in or after fever, or the exanthemata, in septicæmic pneumonia we should, in my opinion, be conservative, corroborative, and supportive. In most of these conditions the complaint is principally

by electricity. Mrs. ——, aged 38, married 19 years, has had four pregnancies,—all of full term, labors natural, recoveries tedious. Ever since her second labor, 16 years ago, has suffered from symptoms of uterine disease. The last child was born 9½ years ago. Since then uterine symptoms have been worse, and consisted of pelvic and lumbar pain, bearing down sensations, proper and protracted menstrual periods, and leucorrhœa. The last period, previous to the symptoms to be detailed, occurred about October 1st, 1884. On the 16 of the same month a single complete act of coitus occurred, there having been abstinence for many months previous, and in the interval before patient's illness. From the 16th October no proper menstruation, but slight discharges of bright red blood at irregular intervals. She suffered from distress after food, nausea, and occasional vomiting, and suspected that she was pregnant. On the 20th December Dr. Gurd, of Montreal, was sent for, and found her suffering from sudden intense pelvic and abdominal pain, vomiting and faintness, amounting to collapse; deadly pallor, weak pulse, normal temperature. Pain principally referred to right iliac region; next day she seemed worse, and Dr. GARDNER saw her in consultation, and on examination found decided tenderness and induration of right iliac region. No general distension of the abdomen. By the vagina the uterus retroverted and prolapsed; the vaginal portion very low, almost at vaginal orifice, slightly softened. The fundus to the left. On the right side of, and behind uterus a firm mass, closely attached to that organ. The diagnosis was hematocele. Morphia was freely given. She rapidly improved. Two or three weeks later, a similar milder attact. After an interval, a third more severe, about the end of January. The tumour on the right of the uterus had increased. Pigmentation of linea alba, areola and follicles about nipple, and to a less extent, of whole lower abdomen. The sound entered 4 inches; cavity empty. Vaginal portion remarkably soft, and swollen. Anterior lip lying in vaginal orifice. Pulsating vessels at sides of vaginal roof. Extra-uterine fœtation was now strongly suspected. Doubtful points were marked hardness and absence of fluctuation or ballottement of tumour. On the other hand, in a few days, distinct bruit de souffle was heard. By the middle of February the tumour extended as high as the anterior superior spine of ilium, and an inch to the left of the middle line, and completely filled the space included within the lines mentioned and ramus of the pubes and crest of the ilium. It was now decided to use electricity. A strong faradic current, as strong as the patient could bear it, was passed through the mass to the right of the uterus. One pole, terminated by an olive-shaped insulated bulb, was passed into the rectum against the tumour. The other pole was a large wet sponge, applied over the mass in the right iliac region. The current was allowed to flow from 5 to 8 minutes, and repeated daily five or six times. The size, pain and tenderness of the tumour were at first increased, but after the third application the bruit de souffle was stilled. A few days after the cessation of the electricity, the size, pain and tenderness of the tumour was much reduced. Shortly afterwards patient began to have labor-like pains, with moderate bleeding. On the second day of these symptoms, examination showed dilation of the cervix, so that the finger easily reached the fundus and cornua of the uterus, and discovered a decidual membrane being separated. This was peeled off. The bloody discharge continued a few days longer. She now improved so rapidly that towards the end of March, at her urgent request, she was allowed to leave her bed, and go to a couch in the same room. But this was unfortunate, for the tumour now became very painful and tender, the surface over it assuming a blush, and becoming œdematous. Temperature rose to 103° Fah., and altogether her condition caused much anxiety. The question of opening and draining the supposed suppurating sac was seriously considered, but she soon began to improve in every respect, and in a few weeks was able to leave her bed. On the 15th June she was examined. She is still pale and thin, but has fair appetite and digestion. Has menstruated twice and profusely. Slight pain increased by exertion. Bladder irritable. The hypogastric tumour still present, but greatly reduced in size and tenderness. Per vaginam, all evidence point to recession of the mass. The uterus measures 3½ inches, and is much firmer.

Dr. Gardner remarked upon the great interest of the subject, an interest arising out of the supposed rarity, of the condition, the difficulty of diagnosis, or, perhaps, rather the rarity with which a diagnosis is made: a tragic and fatal termination alone revealing the true nature of the case, and the recent successful procedures adopted for its treatment.

Lawson Tait has recently secured some remark-

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found the tumor, which three years before reached to the ribs, was now as small as a cocoanut and quite fluid. Removal of the tumor was now advised, but refused by the patient,and the tappings went on till,at the 40th operation, about 250 gallons had been removed. After this no more fluid was secreted, and the patient gradually gained strength.

In 1877 Dr. K. again saw the case, when thet tumor was once more as large as when he firs saw the case, five years before. From this time the tumor grew till it was judged to be over 200 lbs weight, in 1878. Knowing the loose cellular structure of these ædematous fibroids Keith now proposed to break up this structure so as to form at least one large cavity in which the serum would collect, and from which it might be removed by aspiration. Carefully selecting a spot where the many and large veins could best be avoided an opening was made into the capsule, and the upper half of the tumor was broken up with a trochar and the incision closed. Some feverishness followed the operation. In two weeks' time the fluid had so accumulated that it was drawn off. The puncture was made low down and some distance from the incision; about seven lbs. clear serum was removed. The operation was repeated again in ten days; shortly after this feverishness set in, the temperature ran up to 105° and pulse was rapid. For the following seven months the mean temperature was 103 . Every twelve or fourteen days seven litres of stinking pus was removed, always with relief. After one of these punctures collapse followed, and Dr. Keith saw patient again, in April, '79, when he found the tumor an irregular flattened solid mass, about the size of two adult heads. The huge capsule was felt in the flaccid abdomen,like the thick walls of a large ovarian cyst after tapping.

Dr. K. now made an incision twelve or fourteen inches long through the capsule and split open the tumor as far as the pubis, opening a large cavity filled with putrid pus and broken-down tissue, and a blood clot of recent formation, the result of an accident at a tapping. The clot was as large as a head.

The abdominal wall and the capsule were matted together and as soon as the bleeding was controlled by forceps the walls of cyst and abdomen were brought together with sutures put in by a double needle, about one inch from the edge of wound. This effectually controlled the hemorrhage. After cleaning out the cavity it was dried, then washed with zinc chloride and again dried. The wound was left open and a dressing of oakum applied.

This operation was followed by a reduction of temperature and a slow but steady restoration of health, so that on the anniversary of the day she was able to go round with help of a stick.

In May, 1881, the patient was again poorly. It was found that the solid part of the tumor was enlarging the incision by steady pressure upon the opening. There was some irritative fever, and a quantity of pus was found in the old capsule behind the solid part. An incision to one side,through the uterine tissue, was made and about a pint of healthy pus removed. Free bleeding occurred, which had to be arrested by ligatures.

After a few weeks death ensued, the event being hastened by an injudicious diet of beef-steak and porter.

This case of Dr. Keith's is a very interesting one and has for us a plain word of admonition—viz., in any similar case to insist upon hysterectomy as the only proper thing to be done.

The treatment of the pedicle in hysterectomy.—Dr. Keith favors the intraperitoneal method where practicable. Dr. K.'s great and marvelous success in this operation makes his opinion very valuable to those who are undecided as to the best method to pursue in making this most serious operation.

The great trouble connected with the clamp is the difficulty to keep the stump thoroughly disinfected.

1402 St. Catherine St.

Progress of Science.

A CLINICAL LECTURE IN GYNÆCOLOGY,

Delivered at the College of Physicians and Surgeons, New York,

By T. GAILLARD THOMAS, M.D.,

CLINICAL PROFESSOR OF DISEASES OF WOMEN.

The Causes and Treatment of Abortion.—Persistent Sterility.

CASE I.—GENTLEMEN: The first patient this afternoon is Mrs. E. C., twenty-two years of age, and a native of the United States. She has been married three years, and has had no children, but has had three miscarriages.

I ask her how long she has been sick, and she replies that she has never been sick; and, as you look at her, you will believe her statement, for she has a strong and healthy appearance. So I ask her next why she has come here to see us, and she answers, because she is anxious to bear children; and, though she has been pregnant three times, she has had a miscarriage every time. She passed

two years of her married life without becoming pregnant at all, and then she became so, but had miscarriage at the end of three months. She knows of no cause for this miscarriage. In her second pregnancy she miscarried a little short of three months, but without any known cause. She became pregnant a third time, and again miscarried at about the same period as before. At none of these times does she remember to have had a fall or to have made any violent effort, or any slip or misstep, or to have had any sudden fright, or anything else which she could assign as a cause of her miscarriages. All three of them have taken place within the past year. She complains now of no headache, or backache, or any other pain, and she walks easily and seems to be in perfect health.

Now, I show this case to you not because it is a remarkable one, for you will hear such a story as this over and over again, but because I like to show you here, not cases that are rare, and such as you will seldom see elsewhere, but rather cases that are types of classes of such mild conditions as you will often meet with but which will cause you much trouble.

The history you have just heard here is one that you will hear repeated by patients again and again till you get sick of hearing it, and a patient will come back to you eight, ten, or twelve or more times, perhaps, complaining of repeated miscarriages every time, and appealing to you to help her, and, if you fail in your efforts, apparently holding you responsible for her misfortune. And let me tell you here that among the nineteenth-century women there are two classes—one, those who desire, above all things, to become pregnant and bear children; and the other, those who are anxious, above all, not to bear children. Now, this woman is thoroughly unhappy because of her sterility, and she is exceedingly anxious to bear children. Now, forget for a moment where you are, and let us suppose that your patient is a lady of a great deal of wealth and the disposition of a large estate, perhaps, depends on her having a child, and you can imagine how unhappy she would be if she had only repeated miscarriages, and how important it would be for you to find out and, if possible, remove the causes of this mishap. In general, it may be said that miscarriages occuring at the third mouth are due to one of two causes more than to any others.

But first let me tell you, what you already know, no doubt, that out of one hundred cases of miscarriage more than seventy-five will occur at the end of the third month, and the next largest number at the end of the second month, and the next at the end of the fourth month, and the rest of the number will be scattered about in all the other months. That is to say, that over seventy-five per cent. of all cases of miscarriage occur at the end of the third month of gestation. There are two explanations of this fact. The first reason for it is, that at this time the placenta is just becoming throughly formed, while the chorion is disappearing and the manner of the nutrition of the child is changing, and, instead of being localized in the chorion, which receives its blood from the whole intrauterine surface, it is becoming localized in the placenta, which draws its nutrition from a limited surface of the uterus; and, as the chorion degenerates and the placenta is forming and attaching itself more intimately to the uterine walls, the changing from the chorionic to the placental nutrition of the fœtus is marked by a strong tendency to miscarriage. In the second place, you know that at the end of the third month the uterus is becoming so large that it is just beginning to rise out of the pelvis, and at this time, as the body of the uterus rises above the brim, if its supports happen to be a little weak, it is very apt to turn over on itself either to one side, or forward, or backward; and by this means the nutrition of the fœtus is deranged, and hence this is a very frequent cause of miscarriage at this time.

Now, we will go back to the point at which I digressed and where I was saying that there are two great causes, not to mention the numerous possible causes, of habitual abortion in certain women. 1. A posterior displacement of the uterus which interferes with the proper develop-menl of the organ. 2. Syphilis. These are the two main causes; now I will give you some of the others, merely in order to impress these two on your memories. You will sometimes find in a woman who has previously borne children that a slight single unilateral laceration of the cervix will become very irritable during pregnancy, and the reflex irritation thus caused will set up uterine contractions and bring about the expulsion of the fœtus; and this will cause, perhaps, three or four abortions in the course of a year. Again, large granules will form on the cervix of some women every time they become pregnant, and these will set up enough irritation to cause an abortion. These granules sometimes resemble an epithelioma in appearance, and they are frequently mistaken for this by inexperienced physicians; but that they are not such is shown by the fact of their disappearance after every abortion. Again, mere accidental causes will produce a miscarriage in some very nervous women, and these are commonly spoken of as women who "habitually abort." But this term is too frequently applied where the physician has overlooked the true cause, and it is therefore usually only a cloak for his ignorance. Some time ago I had my attention called to a peculiar case of abortion from purely nervous influences as a first cause. The patient was a lady near the fourth month of pregnancy, who was travelling in the railroad cars with her husband. As the engine drew the cars suddenly into a dark tunnel, the roar of the train, multiplied by the echoes of the walls of the tunnel, awoke her from a sound sleep; the noise and the darkness made her believe that an accident had happened, she became greatly frightened, very soon after labor pains came on, by the time she had reached the end of her journey

hypostatic. In what I have called the "ancient days," when a crepitation was detected from any cause, out I fear the lancet was apt to come, and blood taken away from the reservoirs when fulness and force were what was required. Such cases want a greater degree of warmth than has been specified, mild, continual, easily digested articles of food, with a regular adapted and prescribed supply of wine. Depletion is out of the question. There is great weakness after measles. I have seen inflammation of the lungs succeeding measles treated with a leech, and the bite bleeding excessively, I have seen the child die. Bleeding is as inappropriate after measles as a blister after scarlatina, from which I have seen another child die. Good nursing in all cases of pneumonia is of the first importance, and very especially in the pneumonia of the aged and feeble.

I may be permitted a few words on the prevention of pneumonia and prophylaxis. Pneumonia is more prevalent in temperate, humid, variable climates than in countries characterised by a clear cold dry air. It is more prevalent among men than among women, as the former are more exposed to vicissitudes of temperature. It is more common among the indigent than the well-to-do; obviously enough, as the latter are more able to take care of themselves. These facts show that the disease is preventable. In a variable climate like ours, where the thermometer will sometimes drop twenty degrees in as many hours, people should be on their guard. I believe one of the most satisfactory methods of prevention, not only of pneumonia but many other diseases, is the proper protection by warm habiliments of the surface of the body. Flannel is invaluable, and ought to be worn by everybody in these islands.

Then with regard to prophylaxis, it has often occurred to me that treatment in the stage of indisposition preceding the rigor may very reasonably be supposed to prevent the development of the malady. We cannot prove that we prevent it, because we are not sure that it would have occurred. The careful and prudent often prevent ills without being able to demonstrate that they have done so. I believe that rest, extra clothing, warm *pediluvia* and febrifuge drinks taken when the patient feels out of sorts—the period of *malaise*—when a person "feels that he has taken cold"—will often hinder ulterior mischief. The best medicines in such a case are liquor ammoniæ acetatis, or a moderate dose of Dover's powder. It is a notable fact that there exists a personal proclivity to pneumonia, whether a preceding attack predisposes to a subsequent one or not does not matter. Now, when a person disposed to lung inflammation adopts, with good reason, prophylactic measures, and succeeds with them, there must be a fair presumption that he has warded off a serious illness. At all events in his circumstances it is his duty to take time by the forelock.

In introducing for discussion the treatment of pneumonia, I have had no novel or surprising method to advance, nor do I believe in the possibility of any such novelty being forthcoming. What I would urge is that the complaint should be treated on rational and common-sense principles, carried out in accordance with our physiological and pathological knowledge. I would not despise certain methods because they are old, nor sneer at recent ones because they are new. I think it is our duty to find out and accept what is proved to be beneficial, never forgetting to balance most carefully the divergent bearings that are existent in most cases.—*Dublin Med. Press and Circular.*

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In the following pregnancy the same treatment resulted in the birth of a healthy boy at term. His opinion is that the abortions were due to fatty degeneration of the placenta, which in the last two pregnancies was prevented by the chlorate of potassium.

A LECTURE ON NETTLE-RASH.

By McCall Anderson, M.D., Professor of Clinical Medicine in the University of Glasgow; Physician to the Western Infirmary, etc.

Urticaria (Urtica—A Nettle) Nettle-rash —Urticaire—Nesselausschlag.

The *symptoms* of this disorder are very familiar to most persons, seeing that the rash is identical with that resulting from the sting of the common nettle (urtica urens); hence the term nettle-rash. It makes its appearance in the shape of circumscribed elevations, rarely larger than the finger-nail, which are rounded or oval, or which assume the form of segments of circles (pomphi or wheals); and when the patches are present in their most typical form, the center of each is pale, while the periphery is red. This eruption is accompanied by itching, burning, or stinging sensations, which are increased by scratching, and are often very distressing; but its most remarkable character—that by means of which it can be distinguished from most other eruptions, and which often enables us to say that a rash is a member of the nettle-rash group, although it does

not assume the typical character—is the wonderful rapidity with which it appears, and its transient character; for, in a few minutes, it may be fully developed over the greater portion of the body, and within an hour it may all have vanished, although sometimes two or three days elapse before it disappears; it is never followed by desquamation. Its tendency to resolution is indicated by the wheals feeling softer, by the fading of the peripheral redness, and by the subsidence of the irritation. Occasionally, vesicles or bullæ make their appearance upon the patches if the inflammatory action run high, so that the careless observer might mistake the eruption for herpes or pemphigus. And not unfrequently the rash is accompanied by œdema, especially where there is much loose cellular tissue; or œdema may take the place of the eruption—oftenest on the hands and face (*urticaria œdematosa*). The extent of the rash is very various; sometimes it is partial, being limited to the hands or face, while at other times the whole surface is more or less involved. Sometimes the patches are distinct from one another, sometimes they are confluent (*U. conferta*). It presents, too, certain peculiarities, according to the region affected. "When it occurs on the face, it generally produces an œdematous swelling, especially of the eyelids and lips; the wheals, however, are less distinct than usual, and the rash for the most part assumes the character of an urticaria rubra, and consists of red lines and striæ. The neck is comparatively rarely the seat of this eruption, which is, however, more commonly seen on the chest and back, where, as on the face, it often takes the form of striæ, and sometimes of peculiar wavy lines. On the limbs, it is observed less frequently than on the trunk. When nettle-rash affects the neighborhood of a joint, the skin over the articulation becomes swollen and œdematous. If the hands and feet are attached by it, the patient often complains merely that they feel as if covered by some woolen substance * * and no particular change in the appearance of the skin of these parts is to be detected. In some cases, however, the fingers and toes become so swollen that their movements are interfered with." (*On Diseases of the Skin*, by Ferdinand Hebra, M.D., Sydenham Society's translation, vol. i., p. 304).

The rapidity with which nettle-rash comes out, and its evanescence, have led to much speculation as to its cause. There are some who hold that spasm of the muscular fibres of the skin leads to the development of pomphi; while Liveing is of opinion that they are the result of a spasmodic contraction of the muscular coat of the vessels. The most generally received opinion, however, is, that they are due to an acute inflammatory œdema, having its seat in the papillary layer of the corium; and the reason why the rash is so fleeting is, apparently, that the exudation is thinner and more serious than in the case of most other inflammatory affections, and that the vessels soon recover their tonicity, and absorb the exudation.

Urticaria is usually an acute affection which disappears in a few hours (*U. ephemera*), or at most within a few days (*U. evanida*, and sometimes it is preceded and accompanied by fever (*U. febrilis*). The presence of febrile disturbance is rather a favorable feature than otherwise, for then there is a reasonable hope that the attack is an isolated one, and will be of short duration, disappearing with the transient cause which has produced it.

It may seem strange to speak of chronic urticaria, seeing that the grand characteristic of the rash is its evanescence; but what is meant is that, although each individual rash is of short duration, the disease is kept up by constant relapses, and thus may continue even for years (*U. perstans; Nesselsucht; Urticatio*). In this form, errors of diagnosis are apt to arise, for the eruption is, in the majority of cases, nearly or completely absent when the patient presents himself for examination, and then all that we can see upon the skin is the eruption produced by the nails of the patient in scratching (elsewhere designated a puriginoid eruption); but an inquiry into the history of the case will prevent errors, and generally we are told that the eruption comes out when the patient is undressing at night or when he gets warm in bed, or under the influence of nervous excitement. In these cases, too, we may be helped in our diagnosis by writing letters upon the skin with a pencil, which is generally followed almost immediately by a nettle-rash tracing.

There is a variety of nettle-rash to which the term *U. nodosa seu tuberosa* has been given. It is a rare affection; it appears in the shape of pretty hard nodosities about the size of a split marble, and of a reddish color, which involves the skin and subcutaneous cellular tissue, which occur oftenest at night, and disappear in a few hours, frequently to recur. They may involve any part of the body, but the extremities and loins are specially liable to attack. In very rare cases, owing to excessive congestion of the nodosities, rupture of the capillary blood-vessels ensues, so that, after their subsidence, round ecchymoses are left, which gradually disappear. Generally, the nodosities are multiple; but, occasionally, only a single one make its appearance. A case of this kind came under my observation some years ago. A gentleman, about fifty years of age, and otherwise apparently in good health, came to show me a swelling upon the left side of the neck, just below the ear. When I saw it, it was beginning to subside; but it was still three inches in diameter, and raised about an inch and a half above the level of the surface. He told me that he had been subject to this for ten years, the swelling coming on about once in two months, or oftener in damp weather.

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In introducing for discussion the treatment of pneumonia, I have had no novel or surprising method to advance, nor do I believe in the possibility of any such novelty being forthcoming. What I would urge is that the complaint should be treated on rational and common-sense principles, carried out in accordance with our physiological and pathological knowledge. I would not despise certain methods because they are old, nor sneer at recent ones because they are new. I think it is our duty to find out and accept what is proved to be beneficial, never forgetting to balance most carefully the divergent bearings that are existent in most cases.—*Dublin Med. Press and Circular.*

CHLORATE OF POTASSIUM TO PREVENT ABORTION.

Dr. E. S. McKee reports (*Lancet and Clinic*) the case of a woman who aborted ten times consecutively, having conceived twice by one husband and eight times by another. These abortions occurred in the period between the fifth and eighth month. Seeking professional aid when pregnant for the eleventh time, Dr. McKee could find no evidence of syphilitic or other disease to account for the repeated abortions. Chlorate of potassium was ordered, in doses of fifteen grains three times a day, and was continued with but few intermissions until the end of pregnancy, when a healthy boy was born.

In the following pregnancy the same treatment resulted in the birth of a healthy boy at term. His opinion is that the abortions were due to fatty degeneration of the placenta, which in the last two pregnancies was prevented by the chlorate of potassium.

A LECTURE ON NETTLE-RASH.

By McCall Anderson, M.D., Professor of Clinical Medicine in the University of Glasgow; Physician to the Western Infirmary, etc.

Urticaria (Urtica—A Nettle) Nettle-rash —Urticaire—Nesselausschlag.

The *symptoms* of this disorder are very familiar to most persons, seeing that the rash is identical with that resulting from the sting of the common nettle (urtica urens); hence the term nettle-rash. It makes its appearance in the shape of circumscribed elevations, rarely larger than the finger-nail, which are rounded or oval, or which assume the form of segments of circles (pomphi or wheals); and when the patches are present in their most typical form, the center of each is pale, while the periphery is red. This eruption is accompanied by itching, burning, or stinging sensations, which are increased by scratching, and are often very distressing; but its most remarkable character—that by means of which it can be distinguished from most other eruptions, and which often enables us to say that a rash is a member of the nettle-rash group, although it does

not assume the typical character—is the wonderful rapidity with which it appears, and its transient character; for, in a few minutes, it may be fully developed over the greater portion of the body, and within an hour it may all have vanished, although sometimes two or three days elapse before it disappears; it is never followed by desquamation. Its tendency to resolution is indicated by the wheals feeling softer, by the fading of the peripheral redness, and by the subsidence of the irritation. Occasionally, vesicles or bullæ make their appearance upon the patches if the inflammatory action run high, so that the careless observer might mistake the eruption for herpes or pemphigus. And not unfrequently the rash is accompanied by œdema, especially where there is much loose cellular tissue; or œdema may take the place of the eruption—oftenest on the hands and face (*urticaria œdematosa*). The extent of the rash is very various; sometimes it is partial, being limited to the hands or face, while at other times the whole surface is more or less involved. Sometimes the patches are distinct from one another, sometimes they are confluent (*U. conferta*). It presents, too, certain peculiarities, according to the region affected. "When it occurs on the face, it generally produces an œdematous swelling, especially of the eyelids and lips; the wheals, however, are less distinct than usual, and the rash for the most part assumes the character of an urticaria rubra, and consists of red lines and striæ. The neck is comparatively rarely the seat of this eruption, which is, however, more commonly seen on the chest and back, where, as on the face, it often takes the form of striæ, and sometimes of peculiar wavy lines. On the limbs, it is observed less frequently than on the trunk. When nettle-rash affects the neighborhood of a joint, the skin over the articulation becomes swollen and œdematous. If the hands and feet are attached by it, the patient often complains merely that they feel as if covered by some woolen substance * * and no particular change in the appearance of the skin of these parts is to be detected. In some cases, however, the fingers and toes become so swollen that their movements are interfered with." (*On Diseases of the Skin*, by Ferdinand Hebra, M.D., Sydenham Society's translation, vol. i., p. 304).

The rapidity with which nettle-rash comes out, and its evanescence, have led to much speculation as to its cause. There are some who hold that spasm of the muscular fibres of the skin leads to the development of pomphi; while Liveing is of opinion that they are the result of a spasmodic contraction of the muscular coat of the vessels. The most generally received opinion, however, is, that they are due to an acute inflammatory œdema, having its seat in the papillary layer of the corium; and the reason why the rash is so fleeting is, apparently, that the exudation is thinner and more serious than in the case of most other inflammatory affections, and that the vessels soon recover their tonicity, and absorb the exudation.

Urticaria is usually an acute affection which disappears in a few hours (*U. ephemera*), or at most within a few days (*U. evanida*, and sometimes it is preceded and accompanied by fever (*U. febrilis*). The presence of febrile disturbance is rather a favorable feature than otherwise, for then there is a reasonable hope that the attack is an isolated one, and will be of short duration, disappearing with the transient cause which has produced it.

It may seem strange to speak of chronic urticaria, seeing that the grand characteristic of the rash is its evanescence; but what is meant is that, although each individual rash is of short duration, the disease is kept up by constant relapses, and thus may continue even for years (*U. perstans; Nesselsucht; Urticatio*). In this form, errors of diagnosis are apt to arise, for the eruption is, in the majority of cases, nearly or completely absent when the patient presents himself for examination, and then all that we can see upon the skin is the eruption produced by the nails of the patient in scratching (elsewhere designated a puriginoid eruption); but an inquiry into the history of the case will prevent errors, and generally we are told that the eruption comes out when the patient is undressing at night or when he gets warm in bed, or under the influence of nervous excitement. In these cases, too, we may be helped in our diagnosis by writing letters upon the skin with a pencil, which is generally followed almost immediately by a nettle-rash tracing.

There is a variety of nettle-rash to which the term *U. nodosa seu tuberosa* has been given. It is a rare affection; it appears in the shape of pretty hard nodosities about the size of a split marble, and of a reddish color, which involves the skin and subcutaneous cellular tissue, which occur oftenest at night, and disappear in a few hours, frequently to recur. They may involve any part of the body, but the extremities and loins are specially liable to attack. In very rare cases, owing to excessive congestion of the nodosities, rupture of the capillary blood-vessels ensues, so that, after their subsidence, round ecchymoses are left, which gradually disappear. Generally, the nodosities are multiple; but, occasionally, only a single one make its appearance. A case of this kind came under my observation some years ago. A gentleman, about fifty years of age, and otherwise apparently in good health, came to show me a swelling upon the left side of the neck, just below the ear. When I saw it, it was beginning to subside; but it was still three inches in diameter, and raised about an inch and a half above the level of the surface. He told me that he had been subject to this for ten years, the swelling coming on about once in two months, or oftener in damp weather.

that it will fill up, it is a wonder that nature's *cloaca* is maintained at all.

Errors of diet, thought not mentioned first, are not least in causing this habit, which is perhaps, more prevalent in this country than in any other; and some one has said that it is because we eat too little soup. Water as a solvent and a diluent acts in the alimentary canal a very important part, and soup-eating should certainly be encouraged in order to counteract the tendency to take our food too solid, and to favor the fecal current.

Whatever line of diet we are in the habit of taking, and the bowels are normal, if we make a sudden or marked change in our diet, it is often attended by bowel disturbances in one way or the other. I have been in a position to observe a great many persons who have made sudden changes, particularly from a mixed, generous diet, to a vegetarian diet, which from its bulky nature imposes more work on the bowels than they are used to, often beyond their working capacity, and the result would often be acute constipation. The next step then, was to use the much-abused water enema, which to the overworked bowels, seemed a God-send, but by frequent repetition proved a blight to their work, making them a sluggard in the human economy.

I give one case to illustrate:

Mr. S. had been a vegetarian for five years or more, and had adopted two meals a day. He was in fair general health for one of such habits, but his great difficulty was no natural action of the bowels, which had existed for the last five years. His sole reliance for a movement was the coarse food and water enemata, which he had come to take regularly.

He consulted me, ostensibly for hemorrhoids, which he said the doctor who had treated him, told him he had had, and who had expected to operate on him. On making a thorough exploration of the rectum, I was not surprised to find no hemorrhoids, for he gave no symptoms of any. I found, however, a very large, pouch shaped rectum, with flabby, relaxed and attenuated walls, which I attributed to the protracted use of the water enemata.

I changed his diet, stopped the enemas, gave him three meals a day, had him drink four or five goblets of water per day, and had him inject on retiring one-third of a cup of cold water, to be retained. Ordered daily massage and kneading of the bowels, with a mild faradisation of the same; also ten drops of fld ext. casc. sag. four times a day. In four weeks' time he had natural stools, without the use of medicine or treatment of any kind.

A too concentrated diet may cause this habit, but I have observed no danger in this direction. A variable appetite, which makes extremes in quantity and quality of food, is sometimes a cause, but as this would lead us to discussion not intended at this time, we desist. I have often observed that a long journey by rail will produce a severe constipation, and have wondered if the constant jarring of the cars has any thing to do with it.

The more difficult a disease is to treat successfully the longer the list of remedies employed; and, judging from the length of the list in this case, one would be almost discouraged from attempting a cure.

Yet with clear ideas of causes, the indications for treatment are simple, and with the hearty co-operation of the patient the physician may feel quite certain of gaining, sooner or later, the desired result.

The following I give as a general outline of the treatment, which of course must be varied somewhat according to the special indications of each case:

Regulate the diet, having three meals per day of palatable, nutritious food, not too bulky or too concentrated. Have soup at at least one meal each day.

On rising, at least an hour before breakfast, drink one or two large goblets of water. If the stomach is weak and inclined to chronic gastritis, I order the water to be drank hot. Twenty or thirty minutes following the water, give the bowels a thorough kneading for ten minutes. Then assume erect position, with arms above the head and left foot on a line with the right and placed in front of it, bend forward till the knuckles of the closed hands touch the floor, then back to the first position, repeating this five or six times; then, reversing the position of the feet, repeat the movements. This is an excellent exercise for the abdominal muscles and an inactive liver.

At night, also, before retiring, drink a goblet of water, and if there are indications of dryness of lower bowels I use an enema of one-third to one-half cup of water, to be retained.

Flushing the sewer may be a good practice with some, making the stomach the flooding tank; but we must use great care not to interfere with digestion.

When it is available, I often order a fifteen minutes' daily application of electricity to the abdomen, using the Faradic current.

If any medicine is demanded, the first on the list is cascara sagrada. I think it is an excellent "peristaltic persuader." It renders in my hands the most efficient service in small and repeated doses.

I impress it upon my patients to make it a daily practice to go to stool at a regular hour, to induce if possible, by voluntary muscular effort, a movement, remembering that this measure alone, if persisted in, will oftentimes overcome this deplorable habit. Perhaps the best time of the day for this is soon after breakfast. Patient continuation in this line of treatment will do a great deal to dispel this *bête noir* of medical practice.—*Detroit Lancet.*

HEMORRHOIDS.

Dr. T. W. Poole gives vent as follows in the *Canadian Practitioner:*

The Piles! Aha! I knew them well, each feature, though I may not see 'em; Old foes, which fume, and fret, and swell, And vex and plague my perineum. You blush at mention of a "pile," and would, perhaps, the theme avoid; well, then, suppose, to put on style, We call the thing a hemorrhoid. Though bearing an ill-omened name, It seemed as if they might not pain us, When first, as visitors, they came, And took up lodgings in the anus. But now, at each succeeding bout, The pelvic pains appear distincter, And there can be no longer doubt Of their relations with the sphincter. You ask me, by what obvious signs, One may with certainty detect 'em. Well, I can only say that mine Are like a hornet in the rectum, Which, having wandered from the way, And angry at the situation, Stings right and left while yet it may, And tortures one in defecation. "Avaunt! it is a vulgar rhyme." Yet stay, there must be means to cure 'em: Oh, yes, if you but give them time, And meantime patiently endure 'em, There are a thousand cures, you know, All certain sure, as dead shot candy; 'Tis well to buy a score or so, And lay them by to have them handy; And when the hornet's rage is spent, And things assume their wonted quiet, The cure,—though it may not prevent, Will quickly quell the painful riot.—*Medical Age.*

SUB-ACUTE PARENCHYMATOUS NEPHRITIS.

A Clinical Lecture delivered at the Philadelphia Hospital.

By JAMES TYSON, M.D.,

Physician to the Hospital and Professor of General Pathology and Morbid Anatomy in the University of Pennsylvania.

Gentlemen, at our last lecture I presented a case which we recognized as an example of acute inflammation of the kidney, or acute nephritis, or, still more strictly, as acute parenchymatous nephritis. I shall to-day ask attention to a more advanced stage of this affection. The patient is nineteen years of age, and for a year past has lived in the eastern part of this city, working on the docks as a stevedore, from 7 o'clock in the morning until 6 o'clock at night. In August last, he was taken with intermittent fever of the quotidian type. This continued for about two weeks, at the end of which he noticed swelling of the feet, later of the abdomen and finally of the face. Just here let me call attention to the relations which exist between swelling of different parts of the body and diseases of different organs. In the majority of instances, abdominal dropsy is the result of hepatic disease, dropsy of the feet indicates cardiac disease and edema of the face suggests renal disease. This is the general rule, but it is not absolutely without exception. In this case, it is stated that the swelling appeared first in the feet. In this connection I wish also to call attention to the fact that the statements of patients as to the seat of the first appearance of swelling are not always to be relied upon. A man's face may be swollen and the swelling escape notice, but when the feet swell it at once causes difficulty in wearing shoes, and thus attracts attention Abdominal dropsy may occur in kidney disease, but as a rule only in very serious cases, whether acute or chronic. If there is abdominal dropsy with edema of no other part, I think that it may be laid down, as a rule, that the effusion is due to disease of some other organ than the kidney.

When this man was admitted, nine weeks after the swelling was first noticed, there was still much edema of the face, abdomen and legs. Examination of the urine at this time revealed numerous tube casts, mainly granular and blood casts.

A few words may here be said in regard to the significence of tube casts. A diagnosis can seldom be made from casts alone, but much assistance is often rendered by their study, so that the use of the microscope becomes of the greatest importance in the recognition of these affections. If there is one kind of cast which is more valuable in diagnosis than any other, it is the blood-cast. Given a typical blood-cast with blood corpuscles in a highly albuminous urine, it can indicate scarcely anything except an attack of acute Bright's disease or an acute exacerbation supervening on one of the chronic forms. There is another cast valuable in diagnosis, and that is the waxy cast. This is a cast which appears as a solid cylinder as though formed of molten wax, but with a yellowish tinge. When this is found, it indicates with great certainty a case of chronic Bright's disease. Epithelial casts with the epithelium slightly altered, or it may be granular but not fatty, are also found in acute nephritis. Granular casts, which are so full of granular matter that when they are viewed with transmitted light under the microscope they appear black, may be found in acute or chronic Bright's disease. So, too, hyaline casts may be found in acute or chronic disease and in simple congestion of the kidney, as in that from heart disease. On admission, as has been said, blood-casts were found in this man's urine, and we therefore know that at that time he had acute Bright's disease.

Let us now study his condition at the present time, which is not less than three months after the beginning of the trouble, nor, if the disease began at the time the symptoms were noted, not over four months after its inception. Examining the lower extremities, we find the barest noticeable pitting on pressure, in the feet; but there is no edema of the legs or thighs. The same is true of the abdominal walls. There is no edema in the upper extremities or face. The circulation is good and the pulse is 84 per minute. The man states that he feels very comfortable and complains of nothing. Examination of the urine is, therefore, practically the only means by which we are able to arrive at a diagnosis. It constantly happens that in chronic Bright's disease there are no indications

of disease except those derived from examination of the urine.

Let us then examine this man's urine, a specimen of which I show to you. As you see, it is pale and evidently of low specific gravity. The urinometer shows that it is 1012, but I expected from its paleness to have found it still lower, even as low as 1005. Urine of low specific gravity associated with swelling of this kind is of more or less significance and means that the disease is of the sub-acute or chronic form. Of course urine of a low specific gravity may be found in other conditions, particularly functional nervous derangements, but in Bright's disease a low specific gravity indicates that the inflammation has passed beyond the acute stage. The application of the ordinary heat and nitric acid test for albumen reveals its presence in considerable quantity. For practical purposes it is sufficient to indicate the quantity of albumen, when small, by the term faint opalescence; when the quantity is larger, by the term milkiness, and when the quantity is still larger by stating the proportion which the bulk of the precipitate bears to the bulk of urine tested, and for this purpose it is desirable to have a graduated test tube and to set the urine aside for a few hours in order that all the albumen may settle. The albumen will then be said to equal one-eighth, one-sixth, one-fourth, and so on, of the bulk of urine. Let me caution you against a commoner error. Not unfrequently urine which contains one-fourth of its bulk of albumen is put down as containing 25 per cent. of albumen. The expression 25 per cent. means 25 per cent. by weight, but the absurdity of such a statement will be seen when it is remembered that the blood contains but little over 5 per cent. albumen. Urine which contains 5 per cent. of albumen becomes solid on the application of heat. Urine which contains one-fourth its bulk of albumen probably contains about 5 per cent. of albumen. In the present case the urine contains perhaps about one per cent of albumen. Examination of this urine with the microscope shows that it contains hyaline-casts to which are attached a number of leucocytes, granular casts which are both moderately and highly granular and compound granule cells. I do not find on the one hand any blood-casts, and on the other hand I fail to find a single fat cast. The casts which are particularly valuable in distinguishing any variety of disease are wanting. We cannot therefore rely much on the urine in making the diagnosis. I think that acute Bright's disease may however be excluded by the urine examination alone, and independently of the history. There is, however, nothing to show that the disease has passed to the chronic stage. What conclusion therefore is justifiable? This is important, because both the treatment and the prognosis depend on it. From the evidence at our disposal, I should say that this was a case of sub-acute Bright's disease. It is, however, a nice question to decide where to draw the line between acute, sub-acute and chronic Bright's disease. The advance made by some cases toward the anatomical characters of chronic disease is more rapid than in others.

If this man's kidneys could be seen, it would probably be found that they were enlarged, that the cortex was widened and that the uriniferous tubules were filled with desquamated, degenerated epithelium. The kidneys would be pale, because the dilated tubules, taking up more space than in health, squeeze the blood out of the capillaries and because the cells have undergone this degeneration. At the same time, this is not the typical large white kidney in which there are large areas of fatty degeneration. In such cases, the tubules contain not only granular matter, but also large oil drops. In the typical large white kidney numerous white spots, whiter than the rest of the region, are found both in the cortex and on the surface after the capsule has been removed. If these are picked out with a needle and examined with the microscope, they will be found to consist of tubules filled with oil drops. I think that this stage has not yet been reached in the present case.

Even in this stage, the prognosis is comparatively favorable. In the acute stage of Bright's disease it is well-known that the prognosis is quite favorable, for a large majority of such cases, if taken in time and properly treated, will recover. As the case becomes sub-acute the difficulties of treatment increase. In chronic cases the probabilities of recovery are very much diminished. In this case, we may hope that the improvement which has begun will continue.

Before speaking of the treatment I shall refer to the etiology of this particular case. This boy has not had scarlet fever. This is important for by far the greater majority of cases of acute Bright's disease are the result of scarlet fever, and many cases of chronic Bright's disease are due to the same cause. Are there other causes of this affection on which we can lay our fingers? There are a few, and one of these, although perhaps not worthy of the second place, is malarial poison. There seems reasons for believing that the long-continued irritation of malaria is a cause of chronic Bright's disease. At least chronic Bright's disease is more common in intensely malarial districts. I, however, think that it is only in districts where the poison is more than usually intense. This may be said to be the case along the river banks where the patient has worked. Another cause of chronic inflammation of the kidneys is long-continued exposure with frequently recurring wetting of the feet and chilling of the body. Still another cause of this affection is the use of alcohol, but in such cases it is difficult to say how much is due to the direct action of the alcohol and how much to the exposure which necessarily accompanies such indulgence. There are other poisons which, when introduced into the blood are capable of producing this condition. Among these may be mentioned the long-continued use of arsenic and the inhalation of phosphorus to which workers in

match factories are subjected. Cantharides in repeated overdoses may act similarly.

I now come to speak of the treatment. The man has improved much since admission. The dropsy has disappeared and the albumen is diminishing in quantity. Probably the most important lesson which I can impress on you this morning is the fact that there is no direct and specific remedy for this form of Bright's disease. There is no remedy which can be given with the view of acting directly on the condition of the kidney. The treatment must consist therefore essentially, first in placing the patient under such favorable conditions that nature has an opportunity of re-asserting herself and working a cure, and,secondly, in combating the symptoms as they arise.

The patient should be put to bed, protected from the operation of cold, and should have absolute freedom from work. Next to the bed, the best protection against taking cold is afforded by the using of woolen garments next to the skin. The regulation of the diet is important. It is desirable to use food which contains but little nitrogen, for an important danger depends upon the accumulation of urea in the blood. The urea which it is the office of the kidney to eliminate is comparable to the ashes of the fuel by the combustion of which a steam engine is run. It is not, as was formerly supposed, all derived from the wear and tear of the muscular system. Only a trifling portion of the urea arises thus, the greater part being derived from the food. It is evident that if a food which produces little ash is introduced into the system, the labor of the kidney will be diminished. The very best article of food uuder these circumstances is milk, because there is less ash, so to speak, after the consumption of milk than after the use of any other article of food. After milk come the vegetables. The greatest liberty may be allowed a patient of this kind in the use of vegetable food, provided the vegetables are digestible. Indigestible food must be avoided, for the nervous system of these patients is excitable, and just as a raisin in the stomach of a child may cause a convulsion, so an irritant in the stomach of a patient with Bright's disease may induce the same phenomena.

Meat contains a large quantity of nitrogen. Will you, therefore, take the patient off a meat diet? The answer to this question will depend on circumstances. If the symptoms are as urgent as in chronically contracted kidney, meat should be entirely excluded. A case like the present one need not be entirely deprived of meat, but may be allowed once a day. Oysters, fish, and the white meat of poultry which contains less blood and less urea than the dark meat, are suitable. Eggs, the white of which is pure albumen, should be used cautiously. It has been experimentally determined that if sufficient albumen be introduced into the blood, as by ingesting a number of eggs, albuminuria will be induced, and the amount of albumen excreted will exceed that ingested, showing that it acts as an irritant. I should permit only the most moderate use of eggs in a case like the one before us, and in a case of chronic contracted kidney I should prohibit their use.

We next come to the treatment of the symptoms. If there is no dropsy or retention there is no occasion for diuretics. There is a popular idea that diuretics must be given as soon Bright's disease is diagnosed. A proper secretion is necessary for the elimination of effete matter, and therefore if the urine is scanty, diuretics may be used, but diuretics seldom act unless there is a free action of the bowels. It is therefore more important at first to secure free opening of the bowels than it is to administer diuretics. Such action being secured, we may use to increase the secretion of urine and to prevent the accumulation of urea in the blood, digitalis, acetate of potassium, bicarbonate of potassium or citrate of potassium.

I have already stated that there are no drugs, which by their internal administration can be expected to act curatively on such a kidney. This is correct, but at the same time there is a rational measure which I have sometimes found decidedly useful in acute and sub-acute parenchymatous nephritis, and that is counter-irritation over the region of the kidney. This may be done by means of plasters containing pitch and very little cantharides, the warming plaster of the shops; or, better, by a mustard plaster made by using equal parts of white of egg and glycerine as the menstruums for mixing, instead of water. The objection to the mustard plaster made in the ordinary manner is that it becomes painful too soon, while the object is to produce gentle but continued counter-irritation. A mustard plaster made with one part of mustard to flour of flour and mixed with the equal parts of white of egg and glycerine can be worn almost constantly. And so it should be worn. If at times it causes too much irritation, it may be removed at night and re-applied the following morning.

Cases of parenchymatous nephritis are less subject to uremia than are those of interstitial nephritis. If this should supervene, the treatment recommended in a previous lecture should be adopted. Jaborandi, or its active principle pilocarpin, may be employed. In extreme cases of convulsions, I do not hesitate to bleed. It does no harm to the patient to remove sixteen to twenty ounces of blood, while by so doing you remove a large quantity of the urea-loaded blood which is irritating the nerve centres.

INFANT DIGESTION.

By Horatio B. Bigelow, M.D., Washington, D.C.

The question of infant growth is one of assimilation. Assimilation of food will depend upon the integrity of the digestive function. The digestive system of the new-born is not formulated at once, but develops in logical ratio with the expansion of

other parts of the body. Its measure is the requirement necessitated by the elaboration of tissue. Tissue growth is a slow process, demanding especial nourishment, and varied at each advance in age. The necessities of the child, both chemical and physiological, are not those of the adult, because each is adjusted with great exactness to the immediate environment. The excess of non-nitrogenous matter, which is an essential to adult life, is pernicious to the well-being of the infant. Muscles, when at work, consume principally hydrocarbonaceous aliments, and not albuminoid substances. In the infant there is no muscular exertion, and hence it draws more largely for its development upon the nitrogenous substances than upon the hpdrocarbons. At birth the alimentary tract is short, the cæcum being very small, and the masticatory organs are absent. Bidder says that the ptyaline appears only with the cutting of the first tooth. Reasoning from analogy, it is not improbable that the pancreatic and intestinal ferments are also inoperative until about the eighth month. Nature is not a spendthrift, and she would not call into useless action any function not demanded by the necessities of her own handiwork. With the eruption of the teeth a new era begins. Mastication presupposes increased development. Increase of development calls for increase of nourishment, and increase with variety in nourishment sets up new digestive processes, in which the ptyaline and the other ferments play an important part.

The alimentary tract of the infant is exceedingly susceptible, so that nursing women have to be very careful in their diet. Now if this tract is so impressionable as to feel any departure from a standard diet in the mother, how much more seriously will it suffer in the administration directly of unwholesome cow's milk—not unwholesome, perhaps in the light of general use, but unwholesome for the limited infantile digestion. It may have an *acid* reaction, or it may have come from a cow in *heat*, or it may be tainted with certain vegetable substances obnoxious to the child. The natural food of the baby is its mother's milk.

An intelligent study of human milk will lead up to a more just comprehension of the demands of infant digestion, and to a more perfect knowledge of a physician's duty in prescribing for such cases as are, unfortunately, deprived of a mother's breast. It would be a valueless encumbering of space, and an expenditure of time without profit, to cite one-half the analyses that are matters of record. It best subserves the present purpose to view the main constituents of human milk in their relation to certain physiological principles. It is to be noticed first, that woman's milk has an *alkaline* reaction, which persists for an indefinite period, and a specific gravity of about 1.0317. It contains water largely in excess (89.20 in 100 parts), milk-sugar, nitrogenous matter, fat, and salines. The albuminoids will vary in different women so largely that we cannot affirm that any analysis is infallible. A fair average percentage would probably be about 4.84. The milk-sugar (6.997) is much greater than in cow's milk (4.92). These figures are only approximately correct. No two samples yielded the same results. This variability in the composition of woman's milk, if not pathological, is a wise dispensation of nature to provide for the exigencies of each month of advancing age. Thus the function of the milk-sugar as a heat-producer is kept constantly in mind, while the absolute rate of nutrition may vary within wide limits, because the bodily heat must be preserved at all hazard. In fat, woman's milk exceeds that of the cow, but falls far below it in albuminoids. The ash, or mineral constituents of milk, is chiefly concerned in metamorphosis. The basic phosphate of soda is invariably found in the blood, while the acid phosphate of potash is the chief constituent of the juice of the flesh. Phosphate of lime is intimately incorporated with the nitrogenous constituent principles. It is very generally admitted that the carbohydrates lead on to fat-production, through the co-operation of the nitrogenous and saline elements. Nitrogenous elements themselves, when in excess, may also serve as a source of fat. Nitrogenous matters do not, probably, undergo complete oxidation within the body; a portion of them is eliminated as urea. Fatty compounds are of higher value as force producers, because they contain a quantity of hydrogen as well as of carbon free of oxidation. Pavy says that the value of nitrogenous compounds as force-producers depends upon the amount of unoxidized oxidizable elementary matter they contain. In human milk the percentage of nitrogenous matter to carbohydrates is about 1.45. About one-fourth part of its case in is coagulable by acid. The *alkaline reaction* is *highly valuable*, since it serves to convert the *casein* into *soluble albuminoids* and soluble carbohydrates, which are great heat-producers. Writing upon this subject, Kuss says: "It is generally admitted (Moleschott, Voit) that an adult consumes 320 grams of carbon and 21 grams of nitrogen, or, in other words, 130 grams of albuminoid elements, and 488 grams of hydrocarbons and fats (fats 84, hydrocarbons 404); it follows that, in this case, the normal proportion in a mixed diet, of nitrogenous to non-nitrogenous aliments, is 1 to 3.7, while in milk, as well as in the egg, the proportion is 1 to 3, or even 1 to 2; in other words, the quantity of albuminates (nitrogen) is much larger, and of hydrocarbons (carbon) much smaller. This fact may be easily explained by referring to the part played by the hydrocarbons in regard to the production of force, muscular force especially. The adult draws his forces from the combustion of non-nitrogenous substances, the albuminates scarcely serving for this purpose. On the other hand, when the organism is in course of development. the nitrogenous substances are indispensable to the growth of the different tissues. It is therefore easy to see how mistaken is the common practice of condemning

children to a diet containing a large quantity of starch and scarcely any nitrogen."

Woman's milk contains no *starch*. It may be conceded that, in the adult, the ptyaline may continue its action in the stomach; that particles of unconverted starch may be transformed by the pancreatic and intestinal juices. In the infant this rule cannot apply. The baby does not secrete ptyaline until the sixth or eighth month, *neither do the other juices, of pancreas and intestine, have any transforming power whatever before that period.* It is sheer ignorance to assert that small particles of starch can do no harm since they undergo transformation in the intestine, when the truth is that they are not only act as irritants, but pass out of the bowels unchanged. The attenuant of woman's milk is an important factor, of which we have little absolute knowledge. It is chiefly in consideration of this point, that *cow's milk cannot ever be safely substituted for that of the mother.* Before it can satisfactorily approximate to this great food of nature, it must be radically transformed by some chemical process, which science has not yet developed. The addition of water to cow's milk will reduce the percentage of albuminoids into harmonious relationship with human milk, but it does not suffice to change the characteristics of the clot. To use starch as an attenuant is, of course, radically wrong.

In view of these facts, it becomes a matter of the utmost interest to establish some definite principles of treatment, in cases where the mother is unable for any reason to nourish her child properly and sufficiently. There is no known process, chemical or mechanical, by which cow's milk alone can subserve this purposes. Up to six months of age, at least, the baby needs just those equivalents found within the mother's breast—nothing more and nothing less. The compound must be *alkaline* in reaction; it must contain no *cane sugar* (because cane-sugar must be first converted into grape-sugar before it can be assimilated; cane-sugar is frequently subjected to a kind of acetous fermentation, producing excess of acids in the infant stomach, so that bodily heat will diminish and disorders of respiration and circulation will follow), and no starch. It must be rich in heat-producers, although, as I have said before, the amount of albuminoids may vary greatly. Position has something to do with digestion. In some bad cases it will be found that, if the infant be placed in the usual position of a nursing child in its mother's arms, that it will assimilate its food, when artificially fed, much more readily. In the nursing chiid, a by no means inconsiderable amount of heat is derived from the mother's body. An artificially-fed infant is deprived of this, so that there should be some compensatory action in its food. There have been many attempts made to overcome this difficulty, and our journals have been full of discussions upon the matter. It may be said that no artificially-prepared food that does not meet all these requirements will be of permanent value in infantile therapeutics. What is needed is something rich in carbohydrates, with a proper admixture of albuminoids, salts, and moisture, free from starch and sugar, and alkaline in reaction.

In common with many others, I have often been puzzled as to the best way of meeting the emergency. I beg leave to append a few cases from my note-book, as bearing upon this matter:

Case I.—K. S., colored, five months old, apparently dying of marasmus; vomits frequently; diarrhœa, with inability to retain nourishment. Was nursed by mother until two months old; then was fed by bottle on diluted cow's milk. Ordered appropriate remedies, with the formula of infant food as advised by Meigs, in very small quantities. On second day the child was no better. Gave small doses of brandy, burned, with sugar; spice poultice to abdomen. Child continues to fail; entire inability to retain nourishment. At the suggestion of a professional friend, I bought a bottle of Mellin's food and subjected it to a very careful analysis. It seemed to be a close imitation of mother's milk—so that I commenced using it at once. The change was immediate and permanent, and the patient is now a thriving girl of four years. The effect was due to the principle in the food which acted upon the curd and albuminoids, and brought the cow's milk into a harmonious relationship with human milk. The whole system of the child was poisoned by unwholesome food, which it not only could not digest, but which was irritating the whole alimentary track. It wanted heat, and it wanted nitrogenous food. I satisfied myself by personal analysis of the constituents of the preparation, and found that it contained the principles which it seemed to me nature demanded, in exact combination, and more satisfactorily and more cheaply prepared than I could compound upon my own prescription.

Case II.—The particulars of this case were furnished me by a friend. A physician was called to see a case where the child had convulsions after each feeding. He questioned the mother in regard to the milk used. She persisted that it was one cow's milk from a fine Jersey on her own farm, and was quite unwilling to make any change. She was finally persuaded to try the milk from another source, and use it with Mellin's food. The child began to improve at once.

Case III.—Entero-colitis. H.D., the infant son of well-to-do parents, in the summer of 1882, had been allowed from time to time small quantities of starchy food in his milk. One night he became restless and irritable, slept but little, and when sleeping moaned frequently. Rejected his food. These symptoms continued for a day or two, when diarrhœa set in. With the increase of inflammation the discharges became more frequent, consisting of small portions of feculent matter, undigested starch, casein, mucus, etc. The abdomen was tender to the touch, and somewhat swelled. Vomiting was troublesome; pulse 148. Ordered

warm baths, poultices to abdomen, with one dose of spiced syrup of rhubarb and paregoric. Then gave a simple refrigerant mixture, with gradually-increasing quantities of Mellin's food. As the child grew better its abdomen was enveloped in flannel, and it was kept in the open air for as long a time as circumstances would permit. It thrived upon this artificial food, and soon was perfectly well.

These cases, which might easily be multiplied, are of interest only as showing that the nearer we approach to the essential principles of normal human milk in any substitution that we may make use of the better will the results be. The general cause of these summer complaints is one of unwholesome or insufficient food. Nature never offers such to her new-born, and we may well pin our faith to her example. Feed the child upon that preparation which assimilates the closest to mother's milk, and little medicine will be required in our cases of so-called cholera infantum.—*Archives of Pediatrics.*

DISEASES OF THE EYE AND EAR.

COLD, HOT AND WARM APPLICATIONS IN DISEASES OF THE EYE.

By Dr. J. Morrison Ray.

In the first stage of granular conjunçtivitis, where there is much inflammation, iced cloths are useful, checking inflammation to some extent and allaying irritation. Later on, when this condition becomes chronic with its characteristic hard trachoma granule, there being very little inflammatory action present, hot water is often beneficial, and may even be curative. By frequent applications a certain amount of irritation is aroused, accompanied by a swelling of the conjunctiva and a softening of the trachomatous masses, which tend to hasten their absorption. This can be so regulated as to keep up a continuous slight irritation, and thus often a rapid disappearance of the granulations, without even the use of caustics, which have a tendency to cause cicatricial contraction of the conjunctiva, followed by all the bad symptoms incident to this condition, trichiasis, eutropion, etc.

In acute inflammations of the cornea, especially when due to traumatism, iced cloths often give great relief by allaying the pain and limiting the inflammation. In phlyctenular keratitis accompanied by photophobia, which is often seen in badly nourished children, the dropping of iced water on the exposed cornea has been recommended. I have recently seen a case which demonstrates the efficacy of this treatment to a marked degree. The child has been treated by other methods for some time without any apparent benefit. Under the use of iced water, dropped on the forcibly exposed cornea, the improvement was remarkable.

In necrosis of the cornea, occurring in strumous children, non-inflammatory in origin, and without any conjunctival irritation, our chief reliance is in the persistent use of fomentations made of chamomile flowers or poppy-heads.

In abscess of the cornea, accompanied by hypopyon, or the formation and deposit of pus in the anterior chamber, fomentations allay the pain and promote the absorption of the pus. In that form of ulcer of the cornea called serpiginous, occurring at its margin as an ulcerated band with irregular edges with a tendency to spread circumferentially (a condition often seen in old, feeble, and debilitated subjects), and accompanied by considerable conjunctival irritation and a decapillary injection, with often excessive degree of photophobia, rapid improvement sometimes follows the application of heat, moist or dry. The latter is to be preferred as the former produces much swelling of the lids or endema of conjunctiva. The hot applications may be supplemented by a sol. of sulph. eserine (gr. ¼—gr. j—℥ j) dropped in eye several times a day. This is often used with marked benefit. Careful attention must be given to hygienic surroundings. Exercise in open air several times a day should be enjoyed, during which the eyes must be protected from bright light by means of colored glasses.

The above treatment, if carried out properly, has often succeeded in cases where incision of the base of the ulcer (Soemiesch's incision) has failed. In interstitial keratitis hot fomentations assiduously applied, their effect being carefully watched, together with frequent instillations of atropine, are sufficient to allay the pain and ciliary irritation. In suppuration of the cornea after cataract extraction, especially if it be in a weak and debilitated subject, heat in some form is always serviceable. There is generally considerable chemosis of the conjunctiva and swelling of lids, and in this condition dry heat would seem to be indicated. These eyes are, however, usually doomed, and iced cloths often tend to limit the inflammatory condition; but if this be once fully established, the hot water will promote the suppurative process which ultimately terminates in phthisis bulbi.

In iritis, atropine to dilate the pupil preventing adhesions and putting the eye at rest, and the frequent application of hot water to ally the pain and ciliary neuralgia make an excellent treatment.

Frequently a Turkish bath has a marked effect on these cases. I have often seen a pupil dilate under atropine just after a Turkish bath, which before would give no response to the drug, no matter how persistently applied. Traumatic iritis is the only form which will bear the application of cold, and in this the patients often prefer heat, especially if there is a suppurative process going on in the part.

In inflammation of the deeper tunis of the eye, if accompanied by much ciliary irritation or neuralgia, hot water will be agreeable and often beneficial. In sympathetic inflammations hot poultices

of flaxseed or bread and milk continuously applied for some time has been said to be followed by good effects. Ayers reports a case in which poultices were used almost continuously for four months and with marked improvement in the condition of the eye. In inflammation of the circumocular fibrous and cellular tissue, cold continuously applied for hours at a time will tend to diminish the heat and swelling of the part and relieve the pain. If it be desired to expedite the suppurative process, which often can not be prevented, hot water would be in order. It can be seen from what has been said that no strict rules or rigid laws can be laid down as to the use of these agents. Potent for good in one case, they may produce the opposite effect in another suffering from a similar condition. It would seem that the following would be indications for their use in general: In acute inflammations, followed by much elevation of temperature or swelling of the part, or in any condition where a lessening of the vascular action is required, cold in some form, dry or moist, intermittent or continuous, is indicated, and generally gives the required relief. Where an increase in the blood-supply of a part is desired, or when the vitality is threatened by a slow necrotic rather than an inflammatory process, heat in some one of its modes of application is clearly indicated.—New York.—*Louisville Med. Times.*

A MENTION OF TWO FORMS OF EYE DISEASE FREQUENTLY MET WITH IN CHILDREN.

BY H. F. HANSELL, A.M., M.D.

In a dispensary service in a large city a considerable portion of the patients are children from two to six years of age. Philadelphia, from the comparatively good sanitary surroundings of the poor, with the advantage of separate homes, furnishes fewer examples of filth bred diseases than some of her sister cities, but we "have the poor always with us," and meet with a class of diseases which appertain almost exclusively to them. The causes of the diseases and their *raison d'être* are apparent and require only the briefest mention. The food of the poorer classes is of the simplest kind, consisting chiefly of bread and potatoes, very little meat and as little good milk. The kitchen is the living-room; fresh air is regarded as an unmixed evil and a bath a sure means of catching cold. Clean linen is reserved for Sundays and holidays. Several children are compelled to sleep in the same bed. They eat of the food provided for their elders. Their pennies are spent for candies. The ordinary diseases of childhood are treated by administering five cents' worth of castor-oil and confining the patient to the kitchen, there to breathe the fumes from the father's tobacco pipe and the flavors of boiling cabbage. Simple fevers, colds, etc., sometimes recover with this treatment and occasionally a mild inflammation of the eye gets well, but the tendency is to grow worse, and a simple conjunctivitis passes into a chronic form and other tissues become affected.

The two forms of eye diseases to which I wish to call attention, both on account of their frequency and their destruction of function, are Phlyctenular Keratitis and Superficial Vascular Keratitis. The diagnosis between them is sufficiently easy. The former is characterized by the development on the cornea of one or more blebs *with vessels running directly to them.* These blebs have their seat in the anterior layers of the cornea, and consist of a circumscribed minute collection of serum underneath the epithelium and elevating it. The conjunctival vessels involved are the superficial and episcleral and on the surface of the cornea are new vascular formations running directly to the phlyctenulæ. In a few days the vesicle ruptures leaving an ulcer which gradually entirely heals without a persisting scar.

Superficial vascular keratitis, however, is a much more important and disastrous affection, and from the very outset demands skillful attention and patient nursing. It is characterized by an irregular superficial inflammation of the cornea, which either in the very beginning or later is accompanied by the formation of new blood vessels. The symptoms common to all the forms of inflammation of the cornea are prominent. The photophobia is especially conspicuous. The patient buries his head in his mother's lap or in a pillow. Lachrymation is less than in conjunctivitis. The cornea, overhung by the swollen upper lid, is in great part opaque. There may be several patches of opacity or one large irregular patch, the result of the merging of smaller ones; the epithelium is lost, hence the surface is rough, and it is inlaid with vessels. These vessels spring from the pericorneal ring, are new formations, and lie directly on the surface; they have no particular direction or stopping place, but traverse the entire cornea. Children affected with this form of keratitis are said to be scrofulous, and many show the external marks of that diathesis—flat-nose, large pouting lips, decayed teeth—but many others show no such signs. They are simply ill-nourished and ill-cared for. Their digestive organs being abused refuse to properly carry on their functions, and the lower part of the alimentary tract becomes the abiding place for worms, the existence of which should be inquired into, because of its therapeutic importance. Cases of keratitis which have persisted for months and years, going the rounds of the dispensaries, begin to recover only after the effective administration of an anthelmintic. The possibility of the reflex nature of this disease is too often overlooked. We are inclined to fall into routine practice and order iron, quinine and cod-liver oil, without a thought of digestion and assimilation. "Scrofulous" and "malarial" are convenient terms, and are often used to cover our ignorance and want of thoroughness. The patient is thin, pale, fretful, restless, and a disease once

manifesting itself hangs on a long time, but there is seldom positive evidence of scrofulous, phthisical or syphilitic taint. Superficial vascular keratitis is essentially different from the syphilitic form known as "keratitis ex lue" (Arlt.)

Treatment.—Phlyctenular keratitis Among the first remedies is a purge, unless the bowels are regular and symptoms of worms are wanting. One of the best is calomel in quarter-grain doses, repeated every three hours, until twelve doses are taken, and if an anthelmintic is needed the following combination is frequently prescribed at the Polyclinic:—

℞ Hydrarg. Chlor. Mit., gr. iv.
Santonin, gr. j.
Sacch. Lac., q. s. M.
Ft. in Chart. No. iv.
SIG.—One every hour.

The first powder is to be taken at 10 a.m., and no food allowed until all are taken. If the bowels are not freely opened the last powder is to be followed by a dose of castor oil. Then the patient is put upon the following mixture:—

℞ Syr. Ferri Iod., f ℥ ss
Ol. Morrhuæ, f ℥ iiss. M.
SIG.—Teaspoonful t. d.

Locally. Atrop., Sulph., gr. j-f ℥ ss, to be instilled once daily, and Pagenstecher's ointment at night—

℞ Hydrarg. Ox. Flav., gr. j.
Vaselini, ʒ j. M.

Superficial vascular keratitis. The constitutional treatment is the same as above.

Locally. Atropine solution three times daily, after bathing the eyes with *very hot water*. Pagenstecher's ointment at night, and a daily application to the upper and lower lid of—

℞ Acid. Tannic., ʒ j
Glycerini, f ℥ j.

The more frequent use of atropia is here advised on account of the hyperæmia of the iris, which might readily pass into a chronic iritis.

Duration of phlyctenular keratitis, one to two weeks—of superficial vascular keratitis, one month to a year.

The prognosis is good in both.—*Phil. Polyclinic.*

THE TREATMENT OF TYPHOID FEVER.

Dr. S. K. Jackson (*Med. Times*): The author contended that the discussion of this subject, though trite and hackneyed, could not be considered as finished until there was a better agreement among physicians as to the treatment of this disease, or until the mortality occasioned by it was much reduced.

The object of the paper was to point out a line of treatment suggested by a recognition of some pathological conditions long since known to exist, but which had been ignored in looking for indications for treatment. That these conditions have been overlooked is evidenced by the many and conflicting modes of treatment that have at different times been proposed, means not only not called for, but actually injurious. Some of these were enumerated to show that the pathology of the disease could never have suggested them. While all this conflict was being urged, the doctor declared that he had been pursuing one plan of treatment for 35 years, from which he had no reason to deviate, and that it did not contain one of the long list of means to which he had previously referred, and which are generally employed in the treatment of this disease. He was reluctant to state the result of that treatment, but left each one to determine its value for himself.

Among the first and most prominent pathological conditions which had attracted the attention of the author was the nitrogenous waste, the diminution of fibrine, the deficiency of urea and of all the nitrogenous excretions. The fact that they are not excreted is no proof that they are retained in the system, for if they were there would be signs of uræmic poisoning, which no one claims to have seen. They are not excreted, because there are none to be thrown off. One cause of the nitrogenous deficiency is the inability to digest nitrogenous food, which is owing to the absence of the digestive fluid, and this cannot be secreted because of the congested and inflamed condition of the glands and glandular follicles whose duty it is to secrete these juices. Another possible but not probable cause is the consumption of nitrogen by the parasitic organism, which is the acknowledged etiological factor in the production of enteric fever. That the parasite is a nitrogen-feeder is proved by the fact that it lives and thrives in nitrogenous matters, in urea and all nitrogenous excreta. Old logs, rotten wood, and leaf-mould, saturated with these excretions, have been known to be fruitful sources of this fever. If further proof be needed, it is found in the ammoniacal exhalation from a typhoid fever patient from his breath, his skin and his urine. These exhalations are undoubtedly due to the decomposition of the nitrogenous constituents caused by this micro-organism.

This pathological condition furnishes the most important indication in the treatment of this disease. As this nitrogenous waste cannot be supplied by nitrogenous food, the author knew no way of accomplishing this object but by the free administration of ammonia, even to saturation. Fortunately this nitrogenous base furnishes us with salts of such different therapeutical powers as to enable us to select any one suited to any stage of the disease and to any condition of the system. We have in the nitrate of that base the most sedative salt that we possess, and in the carbonate the most stimulating salt of the materia medica. The nitrate of ammonia is capable of reducing the typhoid fever heat down to 102° F., and of keeping it there. As this is not a dangerous de-

gree, the patient is safe, so long as it can be maintained. Ten or twelve grains of the salt every two hours is sufficient for this purpose.

As the disease progresses, and there is less need for a sedative, or if diarrhœa supervenes, the acetate of ammonia is substituted for the nitrate, and acetate of lead and opium are at the same time administered.

If nervous symptoms show themselves with a failure of the vital powers, the carbonate of ammonia in combination with potassium chlorate is resorted to; but if coma develops, recourse is had to the hydrochlorate of ammonia, generally in five grain doses, every two hours. The effect of this is magical. The doctor stated that he had never seen coma in a case which had been treated from the beginning with this ammoniacal course, and had only seen it in badly-nursed cases, or in those treated by other means.

He considered the delirium of typhoid fever to be due to deficient nourishment, a delirium of starvation. It never fails to become quieted in a few hours after the free administration of ammonia. Wandering sometimes occurs if the dose is too small or the intervals between are too long. Patients sometimes ask to have the intervals shortened on account of a confusion of intellect, which appears when the dose has been postponed too long.

For tympanites, turpentine is used by enema or by the mouth.

The pathological condition contended by some to exist in, and be the cause of coma, is a thickened condition of the envelopes of the blood corpuscles, on account of which the brain fails to be nourished, even though the blood contains the normal amount of nourishment. This condition suggested the hydrochlorate of ammonia as a solvent for the thickened envelope; but whether this be its *modus operandi* or not, its effect is almost miraculous. Thus it will be seen that there is no stage of the disease in which one or other salt of ammonia is not used.

Why should cold baths and affusion be used when the temperature can be reduced by simpler and safer means and without the danger of reaction? The author long since abandoned quinine as not being the proper germicide for the typhoid-fever parasite. It is, however, the antidote *par excellence* for the malarial poison, but, as the typhoid fever producing organism differs so essentially from that of malarial fever, it could not be expected that the same agent would destroy both. The parasite of malarial fever is a carbon-feeder, and that highly carbonaceous medicament, quinine, might be expected to be the best agent for destroying it, in accordance with the law (for which the doctor has been contending), viz., "that no organism can live in its own excreta, in the results of its life processes." If carbonic acid gas be thrown off as the excretory product of a life process, a saturation of that gas will check the process and destroy the life. If alcohol be the result, then alcohol is the proper agent to destroy the organism causing it. If sulphuretted hydrogen be evolved, then the compounds of sulphur are the most efficient means of checking the process. So, then, when ammonia is the excretory product, as in typhoid fever, ammonia, as has been shown, is the most efficient germicide. This furnishes us with an additional reason for employing the salts of ammonia, for this nitrogenous base not only supplies the nitrogenous waste but also destroys the vitality of the organism which causes it.

If this be a law, instead of accounting for the protection of the system against a second attack of contagious zymotic diseases by supposing that it is due to exhaustion of the pabulum necessary for the support of the parasite, why not attribute it to the infusion into the system of some excretory product which forever acts as a poison to the parasitic organism? This is the most probable explanation.

With regard to the period of this fever. If it is recognized as early as the third day, it may subside at the end of the first septenary, but if not recognized before the fourth or fifth day it cannot break before the end of the second septenary, but may at that time. If the treatment has not been inaugurated before the beginning of the second septenary the fever cannot be made to yield before the end of the third septenary (the 21st day). That it will yield on that day is almost an absolute certainty.

With regard to the diet, nothing is allowed but milk. Farinaceous preparations are never admissible. They cannot be digested for want of the fluids containing diastase. There cannot be any conversion of amylaceous food into dextrine or grape sugar, so then starchy food cannot be assimilated. If administered, they undergo a fermentation which adds to the gaseous distention and greatly complicates the case.

Animal broths are never allowed until the later stages of the disease, or until there are signs of the secretion of the digestive fluids.

In conclusion the doctor said, "The limited time allowed for this paper has compelled merely an outline of a subject which deserves full discussion. It is left to the profession to test the value of the treatment which has been detailed.—*Maryland Med. Jour.*

NEW HEMOSTATIC AGENT.

Dr. Spaak employs two parts of chloroform to 200 parts of water as a hemostatic in operations on the mouth and throat, and claims that patients thus treated suffer but slight hemorrhage.

He also uses the chloroform water as a spray after excision of the tonsils. This chloroform water seems to close the open mouths of all small blood-vessels instantly.—*Journal de Medicine*, Brussels, Belgium.

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LOCAL AND GENERAL.

In a recent magazine story an overworked literary hack tells how the "demon of unrest" pursued him day and night like the monster in "Frankenstein." Many a worried doctor has doubtless a similar experience; when he has got to the end of his tether he goes about as in a dream, conscious that he is awake, but only partially awake. Our hot summers probably contribute to this effect; and the victim of insomnia and irritable nerves longs for the country and rest. The absolute necessity for a change and rest is the reason why the matter under the above heading has been wanting for some months past. Now that cooler weather goes along with a quieter brain I hope to do a little more writing.

The topic that, above all others, occupies our local medical world is the variola epidemic.

Starting from the Hotel Dieu as a centre it has gradually spread all over this fair city of ours until we are generally regarded by outsiders as a pest-house on an extended scale. Whether there is as much cause for outside alarm as the Boston and New York papers would have us believe is a question, but there can be no doubt but that the city trade is seriously and decidedly affected by it, travel has greatly fallen off, the hotels are almost deserted, and nobody comes near the place who can possibly help it.

I do not propose here to raise the old question as to whether the responsibility for this unfortunate state of things properly lies with the attending physicians at the Hotel Dieu who first saw it the or with the authorities whose duty it was to isola and disinfect the first fruits of somebody's blu der, but I consider it only right to point out tha the present state of things is just what might hav been expected from the half-hearted and entirel inadequate measures resorted to throughout th battle with the disease. There is no use now as far as the *speedy* elimination of the disease is co cerned, to isolate, vaccinate, and clean up.

The colt is escaped from the stable, and it ma ters little whether we close the doors or not.

The time for accomplishing *that* object is gon by forever.

That the weekly number of deaths may be lessened, and the disease confined to the unvaccinated and imperfectly protected is quite true,—that may be done,—but those of us who have watched the progress of previous epidemics know perfectly well that when the number of small-pox patients exceeds $\frac{1}{10}$ per cent. of the population and the area of the disease is the area of the city that the pestilence will not be stayed until all the inhabitants capable of being infected will have been infected.

Those who feel inclined to question that statement would do well to inform themselves regarding the epidemic of 1876-78, and they will find an almost exact parallel in the present one. They will find that the measures, precautionary and other, taken at that time followed leisurely behind that out-break, just as they now do. They talked about opening the civic hospital when it should have been in active operation; they began to vaccinate in a feeble, doubtful sort of way when vaccination should have been in full blast in every city, ward, and in every outlying municipality.

In a half-hearted style they attempted to isolate patients when they should have insisted upon it as if their very lives depended upon its success. They, after weary months of talking, decided that a Board of Health was a good thing for a city, and they conceived the novel notion that this Board should have power sufficient to overcome the prejudices, cupidity and ignorance of the unclean, whether living in high places or not, when such a Board should have been instituted at the very outset. In short, they went tiger-hunting with pop-guns and the wild animal, *more tigri*, turned and feasted on their flesh and blood until he slept from repletion.

But is this suffering all for nothing? Are we to go on in this way, having the usual quinquennial visitation of small-pox, or is there, I ask, balm in Gilead? Regarding measles and scarlet fever and whooping cough a decided answer is possible —we know that we shall have periodic visitations of these maladies; we know that with the fresh renewals of our population will come, for a time at least, fresh crops of morbilli, scarlatina and pertussis, but of variola is this also true? Not necessarily so; with the proper machinery ever ready to be set in motion, a vigilant Health office, a decently intelligent and thoroughly vaccinated population, small-pox can be kept under as surely as fire or dead cats or murder. Whether we shall have during the years 1891-92 another epidemic of small-pox depends as much upon the factors mentioned above as the probability of fire depends upon the existence of an efficient fire department.

Those optimists who see the likelihood of such a radical and sudden change occurring in the habits of the unvaccinated and dominant portion of our population may look forward to the extinction of variola epidemics in this city. Those who regard such a change as possible only as a part of a movement which shall greatly modify the social, political and religious life of this element may not be as sanguine. Personally, I am not sanguine.

All eyes are now turned towards the newly-created Provincial Medical Board. Having at its head the man who, above all others, has preached the benefits of vaccination it is confidently expected that compulsory vaccination will form one of its first projects. Composed of practical hygienists we expect all those schemes to be at once set in operation whereby the baneful effect of the epidemic can be largely neutralized. These things we have a right to anticipate, and, if the outside localities are not immediately *compelled*, at their own expense, to do what they ought long ago to have done voluntarily, the public, lay and professional, will hold them to a strict account. They have the power to do the proper thing, and their failure to do it can only be regarded as, in the highest degree, culpable.

My experience of vaccine has been large. I have used, I believe, samples of every kind that has yet been brought into Montreal, and some that I trust never will be sold here, and I think my successes and my failures have made it possible for me to say with positiveness that vaccinating in hot weather with vaccine brought from a distance is a delusion and a snare. I will never do it again, for I believe that it has done the cause (it is a "cause" in this city) a great deal of harm. It is difficult to persuade people of the utility of being vaccinated after the third or fourth failure, when they have been taught that two or three failures is sufficient to insure immunity from the disease. During the cold months I hope to vaccinate all but a small fraction of my patients that shall require it. We ought to have a properly conducted vaccine farm here, and I believe it would pay. During the next year or two (while King Variola holds sway) not less than 1,000,000 points will be required for Montreal and its surrounding country, and probably $75,000 will be paid for vaccine. Might not some enterprising Canadian have this money as well as the establishments of our American cousins? Surely its greater reliability would give such lymph an immediate sale, to the exclusion of outside competitors.

The dreary fight over the International Medical Congress still goes on. The new Committee met in New York Sept 3rd, and filled the large number of vacancies occasioned by those who declined to co-operate with them. It is a great pity that something was not done at the meeting to heal the breach that widely separates them from so large and influential a section of the profession in America. It will also be a matter of much regret if the American Medical association at its next meeting in St. Louis cannot persuade its members to sink their differences in an united effort to welcome their transatlantic brethren who are not concerned in the Medical politics of the United States.

P. A. LAVER, M.D.

MONTREAL, Sept. 18, 1885.

A young woman named Carmen Rodriguez from Pachuca (Mexico) is on exhibition in this city (Mexico); her height is two metres and eight centimetres, or six feet nine inches. Age 26. Weight twenty *arrobas* or five hundred pounds. Her colossal stature is a sight to see.

A well-known surgeon of ability, who was famed for his brusque and brutal manner, was called to see a rich, but miserly patient, suffering from cancer in the stomach. The patient's condition was

very serious, but the idea of a large fee troubled him sorely.

"Doctor, how much will you charge me?"

"Not a cent."

"Ha, ah! thank you, Doctor."

"Your heirs will pay me," said the Doctor.

The Military Journal of Saint Petersburgh publishes a Ministerial decree, ordering that the 2nd, 3rd, 5th and 8th Battalions of Siberian Chasseurs, shall have a midwife on the staff. Their salary will be three hundred roubles, with an additional allowance of one hundred roubles for messing.

In the *Bulletin Generale de Therapeutique* Dr. Pecholier points out the remarkable fact that the half-dozen drugs generally regarded by physicians as "specifics" are all of them no more nor no less than germicides. Such a conclusion, if fully demonstrated, would be considered strong confirmatory evidence in favor of the germ theory of disease. The specifics named by Pecholier are iodine, mercury, quinine, sulphur and arsenic.

The *Gazette Hebdominaire des Sciences Medicales* of Bordeaux publishes a remarkable article from the celebrated Dr. Picot, in which, after a thorough investigation of the experiments and discoveries of Dr. Ferran, he declares himself a convert, and warmly eulogizes him.

THE MARSEILLAISE.

The following has been composed by an idle Frenchman, to be sung to the well-known air as above:

Allons, enfants, de la patrie,
Le petit microbe est arrivé,
Contre nous de la bacterie
L'étendard sanglant est elevé [*bis.*]
Au phenol, citoyens!
Vive les fumigations!
Dèsinfectons! Dèsinfectons!
Que laudanum abreuve nos sillons.

PERSONAL.

Dr. Wolfred Nelson left the Isthmus by the *Acapulco* for New York. The doctor has been a resident of the Isthmus for five years, and has devoted much attention to diseases of the climate, and particularly to yellow fever, that scourge of the Tropics. Dr. Nelson goes to New York to accept the position of Medical Inspector of the New York Life Insurance Company for the West Indies and Spanish America.

REVIEWS.

Index-Catalogue of the Library of the Surgeon-General's Office, United States Army. Authors and Subjects, Vol. VI. Heastie-Insfeldt. Washington, Government Printing-Office, 1885. Pp. 1051.

The sixth volume of this handsomely-printed catalogue completes the work to and beyond the ninth letter of the alphabet, and includes 7902 author-titles, representing 2543 volumes and 7250 pamphlets. It also includes 14,590 subject-titles of separate books and pamphlets, and 35,290 titles of articles in periodicals. The total number of book-titles contained in the six volumes which have appeared is 64,142, and of the journal articles 219,154. In arrangement of matter and general appearance the volume corresponds with former issues of the series, which reflects honor upon American medicine.

A Complete Pronouncing Medical Dictionary, Embracing the Terminology of Medicine and the Kindred Sciences, with their Signification, Etymology and Pronunciation. By JOSEPH THOMAS, M.D., LL.D., etc., 1 vol. large 8 vo. pp. 884. Philadelphia: J. B. Lippincott Company, 1885.

There has been real need of a work of this kind, and after a careful examination of the manner in which the author has performed his laborious task we have no hesitation in saying that he has succeeded in presenting a medical dictionary, which, for the daily use of the student or the practitioner, is superior to any other in the language. He is especially careful in assigning the derivation of the words, their accents and pronunciation, and their exact meaning according to the usage of the best modern writers. In the preface he explains how extremely difficult at times this is, owing to the absence of any recognized standard of Latin pronunciation or of English spelling, and every editor and lecturer will be prepared to appreciate what he says on these points. Through the assistance of specialists in various branches of medicine and pharmacy he has been able to add all the recent introductions to the phraseology and nomenclature of medicine, surgery, pharmacy, chemistry, and the allied sciences, and in this respect the work stands a long way ahead of any that has yet been issued.

The typographical display of the words and their definitions is exceedingly judicious, and the paper and sizes of type leave nothing to be desired on these heads.

An appendix is added to the volume, giving the most essential elements of Latin grammar, the most usual Latin terms found in medical writings, abbreviations employed, scales of weights and measures, doses of medicines, etc. These are conveniently and clearly arranged, and enhance the value of the volume.

Asiatic Cholera:—A Sketch of its History, Nature, and Preventive Management, is the title of a little pamphlet by OSCAR C. DEWOLFE, A.M., M.D., Commissioner of Health, Chicago, Prof. of State Medicine, Chicago Medical College.

The author would seem to be behind the times when he states that the poison in a dry state may be preserved in definitely, and few will agree with him that the discharges are not infectious immediately after their ejection from the patient.

Some useful hints are given in relation to the prevention of the cholera and the care of the sick.

A Hand-book of Pathological Anatomy and Histology, with an Introductory Section on Post-Mortem Examinations and the Methods of Preserving and Examining Diseased Tissues. By FRANCIS DELAFIELD, M.D., Professor of Pathology and Practical Medicine, College of Physicians and Surgeons, New York; and T. Mitchell Prudden, M.D., Director of the Physiological and Pathological Laboratory of the Alumni Association of the College of Physicians and Surgeons, New York, etc. New York: William Wood & Co., 1885. Pp. xvi-575.

Although this is a second edition it is essentially a new work, as its scope has been very much extended by the many valuable additions made to it, and is intended to supply all the needs of students and practitioners who wish to add a knowledge of the lesions of disease to that of its clinical symptoms.

Part I. Gives directions for making post-mortems and how to prepare and prescribe pathological specimens.

Part II. Embraces a wide range of subjects:—Changes in the blood—Degenerations—Animal Parasites and Bacteria—Inflammations—Tumors.

Part III. Morbid anatomy of the organs, including bones and muscles.

Part IV. Lesions found in general diseases; in poisoning and in violent deaths.

The matter of the work is excellently arranged, and, although somewhat concise, yet nothing important is omitted. The drawings by the authors are well executed and the general appearance of the volume attractive. This book will be found extremely useful to the practitioner as well as to the student and is of more real value than many of the numerous text books now published.

Clinical Charts: Designed for the Convenient, Accurate and Permanent Daily Recording of Cases in Hospital and Private Practice. By J. C. WILSON, M.D., Physician Philadelphia Hospital, etc. Published by J. P. Lippincott Company, Philadelphia. These charts are very convenient to the busy practitioner, as he can enter at once at the bedside important clinical facts and memoranda, thus preserving in sufficient detail, and with little trouble, valuable records of each case. They are put up in blocks of 50 charts, for fifty cents.

Urinary and Renal Derangements and Calculous Disorders. Hints on Diagnosis and Treatment. By LIONEL S. BEALE, M.D., Prof. of the Principles and Practice of Medicine, King's College, London, England. Philadelphia, P. Blakiston, Son & Co., 1012 Walnut St., 1885. Price, $2.00. Montreal, Dawson Bros.

Like all of Beale's writings the book is valuable for the amount of solid information which it contains and makes it a necessary addition to the physician's library. Commencing with the therapeutical indications of the use of acids and alkalies sound advice is given concerning their administration.

In the division relating to urinary deposits, to which too little attention is given by the students, we have all those facts which daily come under the notice of the painstaking physician, and which, with the other clinical conditions, aid in the diagnosis of disease; of substances not found in healthy urine, such as albumen and sugar, a complete resume is given, with very full directions regarding diet, treatment, etc. The concluding division, on calculi and calculous disorders, concludes this interesting and practical volume.

The undermentioned works have been sent to the RECORD for review, owing to circumstances this could not be done in the present number, but due notice of them will be given in our next.

Minor Surgical Gynecology. By P. F. Mundé, M.D.

other parts of the body. Its measure is the requirement necessitated by the elaboration of tissue. Tissue growth is a slow process, demanding especial nourishment, and varied at each advance in age. The necessities of the child, both chemical and physiological, are not those of the adult, because each is adjusted with great exactness to the immediate environment. The excess of non-nitrogenous matter, which is an essential to adult life, is pernicious to the well-being of the infant. Muscles, when at work, consume principally hydrocarbonaceous aliments, and not albuminoid substances. In the infant there is no muscular exertion, and hence it draws more largely for its development upon the nitrogenous substances than upon the hpdrocarbons. At birth the alimentary tract is short, the cæcum being very small, and the masticatory organs are absent. Bidder says that the ptyaline appears only with the cutting of the first tooth. Reasoning from analogy, it is not improbable that the pancreatic and intestinal ferments are also inoperative until about the eighth month. Nature is not a spendthrift, and she would not call into useless action any function not demanded by the necessities of her own handiwork. With the eruption of the teeth a new era begins. Mastication presupposes increased development. Increase of development calls for increase of nourishment, and increase with variety in nourishment sets up new digestive processes, in which the ptyaline and the other ferments play an important part.

The alimentary tract of the infant is exceedingly susceptible, so that nursing women have to be very careful in their diet. Now if this tract is so impressionable as to feel any departure from a standard diet in the mother, how much more seriously will it suffer in the administration directly of unwholesome cow's milk—not unwholesome, perhaps in the light of general use, but unwholesome for the limited infantile digestion. It may have an *acid* reaction, or it may have come from a cow in *heat*, or it may be tainted with certain vegetable substances obnoxious to the child. The natural food of the baby is its mother's milk.

An intelligent study of human milk will lead up to a more just comprehension of the demands of infant digestion, and to a more perfect knowledge of a physician's duty in prescribing for such cases as are, unfortunately, deprived of a mother's breast. It would be a valueless encumbering of space, and an expenditure of time without profit, to cite one-half the analyses that are matters of record. It best subserves the present purpose to view the main constituents of human milk in their relation to certain physiological principles. It is to be noticed first, that woman's milk has an *alkaline* reaction, which persists for an indefinite period, and a specific gravity of about 1.0317. It contains water largely in excess (89.20 in 100 parts), milk-sugar, nitrogenous matter, fat, and salines. The albuminoids will vary in different women so largely that we cannot affirm that any analysis is infallible. A fair average percentage would probably be about 4.84. The milk-sugar (6.997) is much greater than in cow's milk (4 92). These figures are only approximately correct. No two samples yielded the same results. This variability in the composition of woman's milk, if not pathological, is a wise dispensation of nature to provide for the exigencies of each month of advancing age. Thus the function of the milk-sugar as a heat-producer is kept constantly in mind, while the absolute rate of nntrition may vary within wide limits, because the bodily heat must be preserved at all hazard. In fat, woman's milk exceeds that of the cow, but falls far below it in albuminoids. The ash, or mineral constituent of milk, is chiefly concerned in metamorphosis. The basic phosphate of soda is invariably found in the blood, while the acid phosphate of potash is the chief constituent of the juice of the flesh. Phosphate of lime is intimately incorporated with the nitrogenous constituent principles. It is very generally admitted that the carbohydrates lead on to fat-production, through the co-operation of the nitrogenous and saline elements. Nitrogenous elements themselves, when in excess, may also serve as a source of fat. Nitrogenous matters do not, probably, undergo complete oxidation within the body ; a portion of them is eliminated as urea. Fatty compounds are of higher value as force producers, because they contain a quantity of hydrogen as well as of carbon free of oxidation. Pavy says that the value of nitrogenous compounds as force-producers depends upon the amount of unoxidized oxidizable elementary matter they contain. In human milk the percentage of nitrogenous matter to carbohydrates is about 1.45. About one-fourth part of its case in is coagulable by acid. The *alkaline reaction* is *highly valuable*, since it serves to convert the *casein* into *soluble albuminoids* and soluble carbohydrates, which are great heat-producers. Writing upon this subject, Kuss says : " It is generally admitted (Moleschott, Voit) that an adult consumes 320 grams of carbon and 21 grams of nitrogen, or, in other words, 130 grams of albuminoid elements, and 488 grams of hydrocarbons and fats (fats 84, hydrocarbons 404) ; it follows that, in this case, the normal proportion in a mixed diet, of nitrogenous to non-nitrogenous aliments, is 1 to 3.7, while in milk, as well as in the egg, the proportion is 1 to 3, or even 1 to 2 ; in other words, the quantity of albuminates (nitrogen) is much larger, and of hydrocarbons (carbon) much smaller. This fact may be easily explained by referring to the part played by the hydrocarbons in regard to the production of force, muscular force especially. The adult draws his forces from the combustion of non-nitrogenous substances, the albuminates scarcely serving for this purpose. On the other hand, when the organism is in course of development. the nitrogenous substances are indispensable to the growth of the different tissues. It is therefore easy to see how mistaken is the common practice of condemning

children to a diet containing a large quantity of starch and scarcely any nitrogen."

Woman's milk contains no *starch*. It may be conceded that, in the adult, the ptyaline may continue its action in the stomach; that particles of unconverted starch may be transformed by the pancreatic and intestinal juices. In the infant this rule cannot apply. The baby does not secrete ptyaline until the sixth or eighth month, *neither do the other juices, of pancreas and intestine, have any transforming power whatever before that period.* It is sheer ignorance to assert that small particles of starch can do no harm since they undergo transformation in the intestine, when the truth is that they are not only act as irritants, but pass out of the bowels unchanged. The attenuant of woman's milk is an important factor, of which we have little absolute knowledge. It is chiefly in consideration of this point, that *cow's milk cannot ever be safely substituted for that of the mother.* Before it can satisfactorily approximate to this great food of nature, it must be radically transformed by some chemical process, which science has not yet developed. The addition of water to cow's milk will reduce the percentage of albuminoids into harmonious relationship with human milk, but it does not suffice to change the characteristics of the clot. To use starch as an attenuant is, of course, radically wrong.

In view of these facts, it becomes a matter of the utmost interest to establish some definite principles of treatment, in cases where the mother is unable for any reason to nourish her child properly and sufficiently. There is no known process, chemical or mechanical, by which cow's milk alone can subserve this purposes. Up to six months of age, at least, the baby needs just those equivalents found within the mother's breast—nothing more and nothing less. The compound must be *alkaline* in reaction; it must contain no *cane sugar* (because cane-sugar must be first converted into grape-sugar before it can be assimilated; cane-sugar is frequently subjected to a kind of acetous fermentation, producing excess of acids in the infant stomach, so that bodily heat will diminish and disorders of respiration and circulation will follow), and no starch. It must be rich in heat-producers, although, as I have said before, the amount of albuminoids may vary greatly. Position has something to do with digestion. In some bad cases it will be found that, if the infant be placed in the usual position of a nursing child in its mother's arms, that it will assimilate its food, when artificially fed, much more readily. In the nursing chiid, a by no means inconsiderable amount of heat is derived from the mother's body. An artificially-fed infant is deprived of this, so that there should be some compensatory action in its food. There have been many attempts made to overcome this difficulty, and our journals have been full of discussions upon the matter. It may be said that no artificially-prepared food that does not meet all these requirements will be of permanent value in infantile therapeutics. What is needed is something rich in carbohydrates, with a proper admixture of albuminoids, salts, and moisture, free from starch and sugar, and alkaline in reaction.

In common with many others, I have often been puzzled as to the best way of meeting the emergency. I beg leave to append a few cases from my note-book, as bearing upon this matter:

Case I.—K. S., colored, five months old, apparently dying of marasmus; vomits frequently; diarrhœa, with inability to retain nourishment. Was nursed by mother until two months old; then was fed by bottle on diluted cow's milk. Ordered appropriate remedies, with the formula of infant food as advised by Meigs, in very small quantities. On second day the child was no better. Gave small doses of brandy, burned, with sugar; spice poultice to abdomen. Child continues to fail; entire inability to retain nourishment. At the suggestion of a professional friend, I bought a bottle of Mellin's food and subjected it to a very careful analysis. It seemed to be a close imitation of mother's milk—so that I commenced using it at once. The change was immediate and permanent, and the patient is now a thriving girl of four years. The effect was due to the principle in the food which acted upon the curd and albuminoids, and brought the cow's milk into a harmonious relationship with human milk. The whole system of the child was poisoned by unwholesome food, which it not only could not digest, but which was irritating the whole alimentary track. It wanted heat, and it wanted nitrogenous food. I satisfied myself by personal analysis of the constituents of the preparation, and found that it contained the principles which it seemed to me nature demanded, in exact combination, and more satisfactorily and more cheaply prepared than I could compound upon my own prescription.

Case II.—The particulars of this case were furnished me by a friend. A physician was called to see a case where the child had convulsions after each feeding. He questioned the mother in regard to the milk used. She persisted that it was one cow's milk from a fine Jersey on her own farm, and was quite unwilling to make any change. She was finally persuaded to try the milk from another source, and use it with Mellin's food. The child began to improve at once.

Case III.—Entero-colitis. H.D., the infant son of well-to-do parents, in the summer of 1882, had been allowed from time to time small quantities of starchy food in his milk. One night he became restless and irritable, slept but little, and when sleeping moaned frequently. Rejected his food. These symptoms continued for a day or two, when diarrhœa set in. With the increase of inflammation the discharges became more frequent, consisting of small portions of feculent matter, undigested starch, casein, mucus, etc. The abdomen was tender to the touch, and somewhat swelled. Vomiting was troublesome; pulse 148. Ordered

other parts of the body. Its measure is the requirement necessitated by the elaboration of tissue. Tissue growth is a slow process, demanding especial nourishment, and varied at each advance in age. The necessities of the child, both chemical and physiological, are not those of the adult, because each is adjusted with great exactness to the immediate environment. The excess of non-nitrogenous matter, which is an essential to adult life, is pernicious to the well-being of the infant. Muscles, when at work, consume principally hydrocarbonaceous aliments, and not albuminoid substances. In the infant there is no muscular exertion, and hence it draws more largely for its development upon the nitrogenous substances than upon the hpdrocarbons. At birth the alimentary tract is short, the cæcum being very small, and the masticatory organs are absent. Bidder says that the ptyaline appears only with the cutting of the first tooth. Reasoning from analogy, it is not improbable that the pancreatic and intestinal ferments are also inoperative until about the eighth month. Nature is not a spendthrift, and she would not call into useless action any function not demanded by the necessities of her own handiwork. With the eruption of the teeth a new era begins. Mastication presupposes increased development. Increase of development calls for increase of nourishment, and increase with variety in nourishment sets up new digestive processes, in which the ptyaline and the other ferments play an important part.

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other parts of the body. Its measure is the requirement necessitated by the elaboration of tissue. Tissue growth is a slow process, demanding especial nourishment, and varied at each advance in age. The necessities of the child, both chemical and physiological, are not those of the adult, because each is adjusted with great exactness to the immediate environment. The excess of non-nitrogenous matter, which is an essential to adult life, is pernicious to the well-being of the infant. Muscles, when at work, consume principally hydrocarbonaceous aliments, and not albuminoid substances. In the infant there is no muscular exertion, and hence it draws more largely for its development upon the nitrogenous substances than upon the hpdrocarbons. At birth the alimentary tract is short, the cæcum being very small, and the masticatory organs are absent. Bidder says that the ptyaline appears only with the cutting of the first tooth. Reasoning from analogy, it is not improbable that the pancreatic and intestinal ferments are also inoperative until about the eighth month. Nature is not a spendthrift, and she would not call into useless action any function not demanded by the necessities of her own handiwork. With the eruption of the teeth a new era begins. Mastication presupposes increased development. Increase of development calls for increase of nourishment, and increase with variety in nourishment sets up new digestive processes, in which the ptyaline and the other ferments play an important part.

The alimentary tract of the infant is exceedingly susceptible, so that nursing women have to be very careful in their diet. Now if this tract is so impressionable as to feel any departure from a standard diet in the mother, how much more seriously will it suffer in the administration directly of unwholesome cow's milk—not unwholesome, perhaps in the light of general use, but unwholesome for the limited infantile digestion. It may have an *acid* reaction, or it may have come from a cow in *heat*, or it may be tainted with certain vegetable substances obnoxious to the child. The natural food of the baby is its mother's milk.

An intelligent study of human milk will lead up to a more just comprehension of the demands of infant digestion, and to a more perfect knowledge of a physician's duty in prescribing for such cases as are, unfortunately, deprived of a mother's breast. It would be a valueless encumbering of space, and an expenditure of time without profit, to cite one-half the analyses that are matters of record. It best subserves the present purpose to view the main constituents of human milk in their relation to certain physiological principles. It is to be noticed first, that woman's milk has an *alkaline* reaction, which persists for an indefinite period, and a specific gravity of about 1.0317. It contains water largely in excess (89.20 in 100 parts), milk-sugar, nitrogenous matter, fat, and salines. The albuminoids will vary in different women so largely that we cannot affirm that any analysis is infallible. A fair average percentage would probably be about 4.84. The milk-sugar (6.997) is much greater than in cow's milk (4 92). These figures are only approximately correct. No two samples yielded the same results. This variability in the composition of woman's milk, if not pathological, is a wise dispensation of nature to provide for the exigencies of each month of advancing age. Thus the function of the milk-sugar as a heat-producer is kept constantly in mind, while the absolute rate of nntrition may vary within wide limits, because the bodily heat must be preserved at all hazard. In fat, woman's milk exceeds that of the cow, but falls far below it in albuminoids. The ash, or mineral constituent of milk, is chiefly concerned in metamorphosis. The basic phosphate of soda is invariably found in the blood, while the acid phosphate of potash is the chief constituent of the juice of the flesh. Phosphate of lime is intimately incorporated with the nitrogenous constituent principles. It is very generally admitted that the carbohydrates lead on to fat-production, through the co-operation of the nitrogenous and saline elements. Nitrogenous elements themselves, when in excess, may also serve as a source of fat. Nitrogenous matters do not, probably, undergo complete oxidation within the body; a portion of them is eliminated as urea. Fatty compounds are of higher value as force producers, because they contain a quantity of hydrogen as well as of carbon free of oxidation. Pavy says that the value of nitrogenous compounds as force-producers depends upon the amount of unoxidized oxidizable elementary matter they contain. In human milk the percentage of nitrogenous matter to carbohydrates is about 1.45. About one-fourth part of its case in is coagulable by acid. The *alkaline reaction* is *highly valuable*, since it serves to convert the *casein* into *soluble albuminoids* and soluble carbohydrates, which are great heat-producers. Writing upon this subject, Kuss says: "It is generally admitted (Moleschott, Voit) that an adult consumes 320 grams of carbon and 21 grams of nitrogen, or, in other words, 130 grams of albuminoid elements, and 488 grams of hydrocarbons and fats (fats 84, hydrocarbons 404); it follows that, in this case, the normal proportion in a mixed diet, of nitrogenous to non-nitrogenous aliments, is 1 to 3.7, while in milk, as well as in the egg, the proportion is 1 to 3, or even 1 to 2; in other words, the quantity of albuminates (nitrogen) is much larger, and of hydrocarbons (carbon) much smaller. This fact may be easily explained by referring to the part played by the hydrocarbons in regard to the production of force, muscular force especially. The adult draws his forces from the combustion of non-nitrogenous substances, the albuminates scarcely serving for this purpose. On the other hand, when the organism is in course of development. the nitrogenous substances are indispensable to the growth of the different tissues. It is therefore easy to see how mistaken is the common practice of condemning

children to a diet containing a large quantity of starch and scarcely any nitrogen."

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LOCAL AND GENERAL.

In a recent magazine story an overworked literary hack tells how the "demon of unrest" pursued him day and night like the monster in "Frankenstein." Many a worried doctor has doubtless a similar experience; when he has got to the end of his tether he goes about as in a dream, conscious that he is awake, but only partially awake. Our hot summers probably contribute to this effect; and the victim of insomnia and irritable nerves longs for the country and rest. The absolute necessity for a change and rest is the reason why the matter under the above heading has been wanting for some months past. Now that cooler weather goes along with a quieter brain I hope to do a little more writing.

The topic that, above all others, occupies our local medical world is the variola epidemic.

Starting from the Hotel Dieu as a centre it has gradually spread all over this fair city of ours until we are generally regarded by outsiders as a pest-house on an extended scale. Whether there is as much cause for outside alarm as the Boston and New York papers would have us believe is a question, but there can be no doubt but that the city trade is seriously and decidedly affected by it, travel has greatly fallen off, the hotels are almost deserted, and nobody comes near the place who can possibly help it.

I do not propose here to raise the old question as to whether the responsibility for this unfortunate state of things properly lies with the attending physicians at the Hotel Dieu who first saw it there or with the authorities whose duty it was to isolate and disinfect the first fruits of somebody's blunder, but I consider it only right to point out that the present state of things is just what might have been expected from the half-hearted and entirely inadequate measures resorted to throughout the battle with the disease. There is no use now as far as the *speedy* elimination of the disease is concerned, to isolate, vaccinate, and clean up.

The colt is escaped from the stable, and it matters little whether we close the doors or not.

The time for accomplishing *that* object is gone by forever.

That the weekly number of deaths may be lessened, and the disease confined to the unvaccinated and imperfectly protected is quite true,—that may be done,—but those of us who have watched the progress of previous epidemics know perfectly well that when the number of small-pox patients exceeds $\frac{1}{10}$ per cent. of the population and the area of the disease is the area of the city that the pestilence will not be stayed until all the inhabitants capable of being infected will have been infected.

Those who feel inclined to question that statement would do well to inform themselves regarding the epidemic of 1876-78, and they will find an almost exact parallel in the present one. They will find that the measures, precautionary and other, taken at that time followed leisurely behind that out-break, just as they now do. They talked about opening the civic hospital when it should have been in active operation; they began to vaccinate in a feeble, doubtful sort of way when vaccination should have been in full blast in every city, ward, and in every outlying municipality.

In a half-hearted style they attempted to isolate patients when they should have insisted upon it as if their very lives depended upon its success. They, after weary months of talking, decided that a Board of Health was a good thing for a city, and they conceived the novel notion that this Board should have power sufficient to overcome the prejudices, cupidity and ignorance of the unclean, whether living in high places or not, when such a Board should have been instituted at the very outset. In short, they went tiger-hunting with pop-guns and the wild animal, *more tigri*, turned and feasted on their flesh and blood until he slept from repletion.